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Linda E. Fisher-Høyrem (2013)

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What Matter?

Human Nature Beyond the Cartesian Framework

- An essay in Metapsychology

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Thesis submitted in partial fulfilment of the requirements of
the award of Doctor of Philosophy

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Abstract

This thesis seeks to recast the body/mind problem and some of its associated questions in light of a historical diagnosis of the underlying metaphysical premises of the current debate and through a contrastive examination of two alternative metaphysical frameworks. Despite a proliferation of reductive and non-reductive perspectives in contemporary debates about mind/body interaction, a growing consensus recognizes that the dominant philosophical alternatives all fall short of accounting for the complexity of human nature. Rather than simply adding another voice to this debate, this thesis argues that the present philosophical alternatives are only perceived as exhaustive in the first place because they share a certain philosophical ‘framework’ or set of assumptions – about matter, causation, mentality, reality, and the self – one that is distinctly Western and modern, and that provides the terms of the debate itself, framing and limiting the scope of questions and responses alike. Offering a historical diagnosis of what it calls the ‘Cartesian framework’, the thesis shows that despite functioning as a taken-for-granted background, this framework is in fact not a universal ‘given’ evacuated from historical circumstances. The thesis then examines two examples of pre-Cartesian and non-Western metaphysics – namely Thomism and Buddhist philosophy – neither of which encounter any body/mind problem in their accounts of human nature because they do not share the assumptions of the Cartesian framework. Finally, it suggests that more than simply revealing the limitations of the Cartesian framework underpinning contemporary philosophical debates, drawing on these two case studies might offer ways of sidestepping the current philosophical dead-end, as well as having practical implications for any discipline concerned with human nature – our bodies, behavior and ‘inner’ life - beyond mere philosophical speculation.

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Introduction

In the course of my undergraduate degree in psychology I became acquainted with big books containing terms such as ‘mental’ or ‘mind’ in their titles I recollect: *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition* (American Psychiatric Association 2000),¹ *Psychology: The science of the mind and behaviour* (Gross 2010) or *Encyclopaedia of Mental Health* (Friedman 1998),² to mention only a few. Despite their expansive volume and in-depth exposition of mental functioning (and malfunctioning), there seemed to be a striking absence of a definition or consideration of the very concept of ‘the mental’. The notions of ‘illness’ and ‘disorder’ and their causes were unpacked in various fashions and considered from multiple angles, but the mental and the mind were most often left conceptually bare. This regretful situation is acknowledged by Bengt Brülde and Filip Radovic, when they say that in ‘almost everything that has been written about the concept of mental disorder...focus has not been on what makes a disorder *mental*, but on what makes a mental disorder a *disorder*’ (2006, 99).³ Something of this sentiment is reflected in the response of a cognitive psychologist, whose book manuscript I had the opportunity of reading, when I asked why his book did not explain what was meant by the terms ‘mind’ or ‘cognition’

¹ The DSM-IV-TR does give a brief definition of mental disorder. On p. xxx. the authors acknowledge that ‘*the term mental disorder unfortunately implies a distinction between “mental” disorders and “physical” disorders that is a reductionist anachronism of mind/body dualism...unfortunately the term persists in the title of DSM-IV because we have not found an appropriate substitute.*’ Yet there are no further attempts to unpack or consider what the mental or the mind is. The definition given of ‘mental disorder’ is concerned with the ‘disorder’ aspect, using words like distress, disability, or risk of suffering, construing it as ‘*a manifestation of behavioural, psychological and biological dysfunction in the individual.*’

² In its introduction, the ‘Encyclopaedia of Mental Health’ points out some emerging trends in the picture of mental health, one being that ‘*we have moved beyond the old “mental” versus “physical” dichotomies. To a greater extent than previously imagined, there is a stronger reciprocal relation between our general health and activity and our cognitions, moods and mental well-being.*’ (Friedman 1998, xvii) While it does move beyond pathology to an emphasis on the various intersecting forces that constitute mental health, the allegedly new non-dualistic view of human nature is left conceptually unattended.

³ Or, as Naill McLaren points out, there is a lack of application in regards to theories of mind put forward in Philosophy of Mind; ‘*...if they don’t immediately generate a theory of mental disorder, they aren’t worth the paper they are written on. Any valid theory of mind must be able to predict how and why the mind will begin to malfunction...[Most theories in the contemporary debate] don’t offer a starting point. Unfortunately they have left the field wide open for psychiatry to embrace the notion that, whatever the mind is, mental disorder is nothing more than a biological disease of the brain. I also believe that notion, called biological reductionism, is completely wrong and is causing huge damage to mentally-troubled people, as well as needlessly costing the taxpayer a large and ever-increasing fortune.*’ (McLaren 2012, 4)

he replied: 'If we had to consider what ontological status the mind has before we can do research in cognitive psychology, we'd never get any work done.' Evidently, the very notion of the mental and the mind utilised in the fields of psychology, psychiatry, neuroscience, and cognitive science remains under-examined; a reductive physicalist stance along the lines of identity theory tends to be the default position.⁴

Why, then, would a student of psychology consider the understanding of the mental and its relation to the physical so important? According to the research of Jochen Fahrenberg and Marcus Cheetham (2000; 2007), 70% to 90% of psychology students believe that philosophical preconceptions (i.e. views on free will, consciousness and the mind/body problem) and assumptions about human nature have an impact on their professional working practice. Further, their results showed significant inconsistencies in the views of over half of the students, such as 'belief in psychophysical causation, assumption of free and morally responsible acts of violation, despite contradictory psychoanalytic and neuropsychological evidence...' (Fahrenberg and Cheetham 2007, 195). In her research on how diagnostic-therapeutic strategies are affected by beliefs about the nature of mind and body, Kornelia Wider (1994, as referenced by Fahrenberg and Cheetham 2000, 55–56) found that almost all of the participants questioned (medical doctors and psychologists) were convinced that their assumptions about human nature and about the nature of the mind and body affected the diagnosis, treatment, and interaction with the patient. However, only 55% of them had to 'some degree' thought through their own view on the mind/body problem. For those who had, the preferred preconceptions were Complementarity (a principle borrowed from quantum physics stating that an object sometimes can have several (apparently) contradictory properties) and Identity Theory (in principle stating that two events that always occur together at the same time in the same place without any temporal or spatial differentiation at all are not two events but one and the same event). In philosophy of mind, however, both of these options are considered to be riddled with difficulties and to a large extent inadequate. Our failure within the discipline of psychology to understand the mind—or rather, our insistence on viewing human beings

⁴ David Canter (2012) outlines briefly the consequences of this approach in the understanding of disordered selves, adolescence, education, approach to dyslexia and understanding of violence –in particular rape. Christopher Cook (2011) considers a slightly different aspect, namely lack of consideration of the notion of transcendence in the therapeutic practice.

through an inadequate theory of mind—has led to a number of therapeutic approaches and definitions of health, in particular mental health, that are ill-fitted to the task. Frustration with this situation led me to turn to philosophy of mind, hoping the philosophers would be able to provide a better ontological grasp on what a human being is.

Philosophers are indeed discussing these issues, but my naïve hopes of quickly extracting a theory of human nature and returning to psychology with the good news were quickly disappointed. In a time of exponential growth in our understanding of brain functioning, DNA and biology, other aspects of our humanity have been pushed to the fringes or conflated with neurochemical brain processes. In contemporary research, the science of the brain has become the whole story; it is the necessary and sufficient condition for consciousness and intentionality, as exemplified in Susan Greenfield's statement: 'our identity *is* our brain.'(2008)⁵ However, a growing number of voices argue that our theory of human nature or lack thereof in this neurocentric age falls short. This is not to be understood simply as an anti-scientific movement; rather it is a push against what Raymond Tallis calls, '“scientism”: the mistaken belief that the natural sciences (physics, chemistry, biology and their derivatives) can or will give a complete description and even explanation of everything, including human life' (2011, 15). Or as K. Tsuda describes it 'biologise'; approaches that study 'super-biotic entities—societies, cultures, detective stories—[by] inappropriate application of laws drawn from biotic processes to subjects which resist biological explanation'(Tsuda 2011, 81). These terms capture the breadth of theories 'which are typically reductionist in attempting to explain, model or understand fundamentally human processes as varied as consciousness, culture, courtship, contemporary art or broader issues such as political or economic processes in terms or biology [or physics]' (Canter 2012, 95).

Philosophers such as Jaegwon Kim (1997), Peter Hacker (2007; 2012), John Heil (2004),

⁵ Obviously, Greenfield is not alone among authors in the peculiar genre of popular science in making such bold statements. See for example Daniel Dennett (1992), John Gray (2009; 2002), Steven Pinker (1999).

Raymond Tallis (2011) and John Haldane (2000b) are among those who have expressed growing dissatisfaction with current approaches to the study of the mind, the number of problems and the lack of progress in dealing with them. The problems can be roughly divided into the following four categories: (1) the problem of causation, better known as the mind/body problem; (2) the problem of consciousness and intentionality, described by Chalmers (1995) as the 'hard problem of consciousness', referring to the difficulties we have in explaining why we have qualitative phenomenal experiences; (3) the problem of Self and personal identity, which has been illustrated by various thought experiments such as the ship of Theseus, or brain transplants (introduced by Sydney Shoemaker); and (4) problems concerning the external world, perception and other minds that arise due to the fundamentally ontological and epistemological nature of the divide between material and mental life. Current views on these issues range from extreme scepticism about every aspect of the external world, including the reliability of our perception and the reality of other minds to extreme realism, where reality is understood as nothing but the 'physical' world which is governed by cause and effect. In the final chapter of *Philosophy of Mind, a guide and anthology*, John Heil says, 'Perhaps what we need is something completely different. But what could this something be? The usual suspects—materialism, dualism, idealism—apparently exhaust the space of possibilities' (2004, 757). According to Heil, then, the available options are proving inadequate to the task of solving the problems arising from the current conceptual framework. It seems that current philosophy of mind finds itself at a dead-end.

In response to this situation, some philosophers are indeed seeking new avenues. The most moderate view currently in circulation, the so-called Embodied Cognition (EC) model, retains the brain as the locus of exploration, but it acknowledges: (1) that the brain is an inseparable part of the body; (2) that the embodied brain cannot be understood outside of its environment; and that (3) the embodied brain stands continually in relation to other people. EC can be seen as a continuation along the lines of cognitive science where the brain, body and world mesh.⁶ While this view certainly expands the understanding of the brain, it nevertheless retains a particular view of matter and ontology that pushes consciousness and intentionality to the fringes of

⁶ Proponents of this view are Andy Clark (1997; 2001; 2010), Lawrence Shapiro (2011), Antonio Damasio (2005), Shaun Gallagher (2005), and Francisco Varela (1993; 1999).

ontological reality. A more extreme approach is therefore to question the conventional view of matter implicit in brain-based understandings of consciousness. One possibility is that a richer notion of matter than the Cartesian matter—extended in time and space as prevalent in traditional physics—could provide a foundation for consciousness, the self and agency. For some, Quantum Theory (QT) seems like a potential place to find such an alternative view of matter. The QT account of matter unveils ‘weird’ phenomena such as delocalization (elementary particles seem to lack an absolute position) and ‘spooky’ action across distances (events such as particle collapse, in one place, determining the same event at another). As a result, some are hopeful that these new insights into the question of matter will also provide insights into the nature of the mind.⁷ However, as Tallis poignantly observes: ‘If we are going to seek a materialist account of mind, whether or not we look for it in the distinctive material properties of the brain, we need a richer, not just weirder, idea of matter...of which the world is made.’ (Tallis 2011, 353) The third and most radical approach currently in play not only seeks to rethink the concept of matter, but furthermore posits a new conception of reality all together, propagating the idea that the mind or consciousness is present through out the entire universe –a version of Panpsychism.⁸ While this approach also has appeal, it does seem to leave open the question of how one is to make any meaningful distinction between such notably different things as a rock and an animal.⁹

While somewhat sympathetic to these attempts to escape the present deadlock, this thesis will approach the mind/body problem in a different way. To be more precise, it is not concerned with the mind/body problem per se, but with the unarticulated assumptions that serve to condition and cast the particular kind of problems in the current debate. Tallis has put forward the following challenge to scholars in the field of philosophy: ‘It is time for philosophy to reassume its fundamental duty: to look critically at the conceptual framework and presuppositions within which contemporary thought operates. It should challenge the claims, which are increasingly being nodded

⁷ Among the advocates of this kind of approach are David Hodgson (1991) and Henry Stapp (2007)

⁸ The most famous living philosopher to hold this view is probably David Chalmers (1996; 2010) but he is neither the first nor alone. See for example Baruch Spinoza and Galen Stawson (2006).

⁹ Further, introduction texts to philosophy of mind have started to include sections on hylemorphism, not only as historical curiosities, but as viable options to the contemporary debate. Two examples of such texts are; William Jaworski (2011) and Edmund Feser (2006). In recent years several books on Buddhist metaphysics have been published with chapters dedicated to the concerns of philosophy of mind, for example Christian Coseru (2012a), Noa Ronkin (2010), and Mark Siderits (2003a; 2007).

through...'(Tallis 2011, 347) This thesis is such an attempt, as well as a hopeful starting point for a future exploration of a coherent framework of what it is to be human.

In light of the motivation for this thesis, it is a work in metapsychology. This thesis argues that the present philosophical alternatives are only perceived as exhaustive—as according to Heil, quoted above—in the first place because they share a certain philosophical ‘framework’ or set of assumptions about matter, causation, mentality, reality, and the self. This thesis takes the mind/body problem as its entry point—since this problem is entwined with the understanding of the mind, cognition and the brain in both psychology and neuroscience—but it is ultimately concerned with a wider question of human nature. In other words, the thesis does not attempt to provide a solution to the mind/body problem as such, but rather to *recast* the mind/body problem and some of its associated questions by unveiling the underlying metaphysical premises that provide the terms of the debate itself, framing and restricting the range of questions and responses alike. A primary aim of this thesis is therefore to show why the options available in current philosophy of mind *appear* exhaustive. Along with archaic forms of dualism, the dominant reductive and non-reductive physicalist stances share a certain set of assumptions about matter, causation, mentality, reality and the self. These assumptions are distinctly Western and modern. My hope is that articulating these implicit assumptions might open up potential avenues for future debates. By revealing the basic assumptions, and also by attending to and taking inspiration from alternative metaphysical frameworks, these assumptions can themselves become objects of reconsideration and re-imagination. Although an approach of this kind might not ‘solve’ the mind/body problem, it does *dissolve* it. While a full-blown account of what an alternative metaphysics might look like is far beyond the scope of this thesis, the present argument nonetheless prepares the ground for such an endeavour. The conclusion of the thesis provides ten points that outline some of the issues such an endeavour must take into account –the implications of which reach beyond the philosopher’s armchair, hopefully providing insight towards a much-needed framework for researchers and practitioners who are more directly concerned with human health and well-being.

The thesis consists of three main parts, which in turn are organised into six chapters, and it comes to an end with a conclusion followed by an epilogue.

Part One describes the current landscape of philosophy of mind, establishing the problems at hand. Chapter one turns its attention to the lamenting voices which complain of the difficulties within the field. It argues that rather than having exhausted the scope of possibilities per se, the discussion has become unduly limited because of a shared set of basic assumptions concerning reality, matter, causation, the mind, and the self.

Rather than adding another voice to the debate, Part Two of the thesis seeks to provide an historical diagnosis, showing how this set of assumptions—what will be called the ‘Cartesian framework’—is not a universal given, but rather a particularly Western and modern way of viewing reality.¹⁰ Chapter two describes the main features of the Cartesian framework, and clarifies how it colours the current debate. These features include a mechanistic view of matter standing in opposition to the immaterial mind, and further a particular view of the role of rationality and the view of the individual self. Chapter three traces the historical development of some of these features. Of central importance are the ideas which lead to the notion of ‘atomised’ individuals and the corresponding of inner self and immaterial mind/consciousness. By historically situating the implicit presuppositions governing the current debate, the chapter opens up the possibility of a reconsideration of these assumptions.

Following from the argument that the Cartesian framework is specifically modern and Western—and that so are the questions and answers it enables and conditions—Part Three considers one pre-Cartesian and one non-Western metaphysical framework. The intention is to show that there are alternative frameworks available where the problems specific to the Cartesian framework do not emerge. Chapter four presents

¹⁰ ‘Cartesian’ here refers to the abiding influence of Descartes’s metaphysics in contemporary presumptions about reality and the mind and does not denote the current debate as dualistic per se.

selected features of a Thomistic metaphysical framework, focussing on its view of reality, matter, causation and human nature. Chapter five takes a similar approach to a more generically conceived Buddhist metaphysics. This part is drawn to a close in chapter six, which is a comparison and appraisal of the two frameworks. While they are of course not without their own problems and difficulties, assessing these metaphysical alternatives reinforces the point that the premises for the current debate need not necessarily be what they are. Furthermore, they both provide different perspectives on reality, matter, causation and human nature that can serve as inspiration when re-imagining an alternative metaphysics beyond the current deadlock.

In the light of both the historical genealogy of the Cartesian framework and the expositions of the Buddhist and Thomistic frameworks, the conclusion points beyond the argument of this thesis by listing which features need to be considered in a re-imagining of the fundamental assumptions shaping our understanding of the mind/body problem and our understanding of human nature. Of course, the intention is not to provide an encompassing 'new' metaphysics, but only to prove that the topic merits further consideration as it does fundamentally recast the mind/body problem.

Part One

Contemporary Philosophy of Mind:

Its Characteristics and Tensions

1. The Status quo in Philosophy of Mind

Like late-scholasticism, analytical philosophy has tended to narrow the range of possible formulations of problems and their treatments... While these issues [the ontology of the mental and the understanding of intentional relations between persons and their environment] have been the focus of a very great intellectual effort over the last twenty years—far greater indeed than any previous period—these decades have brought more frustration than relief. It seems that the intensification of certain research programs—such as those of developing causal and/or representational theories of mind—has succeeded only in restricting the subject to a point where it has become almost impossible to accommodate the basic features of mindedness as these are revealed in experience and reflection... (Haldane 2000a, 302)

Despite the increased effort and the numerous theories propagated in philosophy of mind, as illustrated by Haldane, there is a growing consensus that the disparate approaches currently entertained within the field are proving to be inadequate. It seems that all logical possibilities available have been tested and found wanting, and one could be forgiven for thinking that the mind/body problem might be in principle insoluble. While much progress has been made in the neurosciences, these results have yet to be incorporated into a coherent view of the mind and human nature that could do justice to our pre-theoretical intuitions on these matters – precisely because there is no adequate framework that can help us do so. John Heil sums up the situation in the following manner:

As things now stand, even if we possessed a fully adequate empirical theory of consciousness, we should be in no position to recognise it as such. Our problem is not so much the lack of detailed information, but the lack of an adequate conceptual framework to make sense of whatever information we might obtain. We have learned much and we have much to learn about the brain. But to take one current predominant example, it is hard to see how any conceivable neurobiological discovery could account for the qualities of conscious experience. My conception is that before we can hope to advance an empirical theory of the mind, we must have a clear conception of the underlying ontology. This will give us not an axiomatic system within which to deduce truths about the mind, but a suitable structure within which to locate empirical truths. (Heil 2004, 192)

In spite of the great intellectual effort given to mind/body related issues over the last decades, there is no clear conception of any foundational ontology of what it is to be human.¹¹ While the debate in contemporary philosophy of mind may seem broad and diverse containing a variety of different theories, it is not necessarily so; the options put forward have serious limitations. Having apparently exhausted the scope of possibilities, philosophy of mind seems to have reached a deadend. This chapter will argue, however, that beneath the appearance of diversity lies a common set of assumptions which frames our conceptions of the logical possibilities within the field. In short, there is something wrong with the underlying framework.

In order to explore why—despite the increased effort and the seemingly numerous theories propagated in philosophy of mind—there is a growing consensus that the current framework within the field is proving to be inadequate, this chapter will first provide a brief account of the prelude to the current debate. An outline of the academic context of the debate will enable an understanding of why the questions are framed in the way in which they are. Secondly, the chapter will describe some of the apriori assumptions prevalent in shaping the debate—in particular that of physicalism. Thirdly, it will consider the various ways of understanding the mind/body relationship presently circulating in contemporary scholarly debates. The problems arising from this common view of the mind/body relationship will be elaborated upon in the fourth section. Finally, the chapter will present an evaluation of the present state of the debate and its points of tension. It will be argued that the stalemate of the debate is not a matter of all possibilities having been exhausted: rather, what has been exhausted are only the *logical possibilities within a specific framework*. The chapter concludes, in agreement with Heil, that we need a new ontology or framework, and that the first step towards this is to properly understand our current predicament.

1.1 Prelude to the Current Debate

In order to attain a better understanding of the current situation in the field of

¹¹ Others who have made this point recently are Stanley Klein (2012a; 2012b), Max Velmans (2012), David Canter (2012), Vadim Vasilyev (2013), Edouard Machery (2012), and Michael Silberstein (2012).

philosophy of mind this section points out some of the prominent features of the philosophical landscape that one might use as general orientation markers in navigating the terrain. This will serve as a backdrop for locating the central issues and conceivable options. It begins with the rise of behaviourism in the early 20th century, which represented a shift in the understanding of the mind and the mental. Behaviourism effectively broke the final explicit ties with the dualist conceptions of the mind, and would shape the debate about the mind until our time.

In psychology, the theory of Behaviourism emerged in the early 20th century, propagated by John B. Watson, B. F. Skinner and Ivan Pavlov, among others. Although influential across a number of academic disciplines, the central issue at stake within the field of psychology was the discipline's status as a purely objective and experimental—in short, a *natural*—science, like physics or chemistry. Introspection was considered to be unscientific, and therefore concepts such as 'consciousness' or 'the mental' were considered to have no significant value in the psychological/scientific (ultimate) explanation of human behaviour. In a sense, one might say that the aim for behaviourist psychology was to master—that is, to predict and control—human behaviour. It sought to break down (what were perceived to be) the mechanisms underlying behaviour into simpler mechanisms – in other words, the difference between the complex and the simple was assumed to be not one of kind, but only degree. According to this view, there is no difference in *kind* between human beings and non-human beings, only a difference in the *degree* of complexity, where humans are considered to be more complex than other animals. Behaviour was cast merely as a result of mechanisms of stimuli-response, and consciousness—if its existence was acknowledged at all—was secondary to these basic mechanisms. In short the mind was considered to be mere epiphenomenal.

Within the field of philosophy, however, behaviourism was to take on a different flavour.¹² Not overly concerned with the 'scientific' status of psychology, this

¹² This was best known as logical behaviourism, with Rudolf Carnap, Carl Hempel and Gilbert Ryle as some of its main proponents.

strand of thought focussed instead on the meaning of terms and the significance of attributing states of mind to intelligent agents. This view contended that emotions, thoughts and intentions were simply—and importantly no more than—ways of behaving. To give one example: ‘Being sad’ was not ultimately about being in a certain specific kind of inner state—and definitely not an inner state of an *immaterial* sort—but rather about behaving or being disposed to behaving in a certain way. This rules out the existence of a Cartesian ego – that notion of an inner, immaterial citadel where one’s true, conscious identity resides. This idea was entirely in vogue with broader reductionist tendencies of the time, with its emphasis on empirical observation and verification. Verificationism holds that the meaning of a statement can only be determined if there is a way of testing that it is true or false. Behaviourism then seemed unavoidable, as the only way of verifying claims about the mind was by observing people’s behaviour. However, the principle of verification had inherent problems, such as verifying its self, the implicit notion of reduction and inability to account for subjectivity and past one-off events such as the big bang. Having risen on the warm winds of Philosophical Behaviourism, Psychological Behaviourism had its downfall the moment verificationism caved in. Attacks were even launched directly on Psychological Behaviourism by thinkers such as Noam Chomsky, who argued that behaviourism could not give an account of our ability to learn and use language. With the rejection of Behaviourism both in psychology and philosophy, the question ‘what is the mind?’ was again open.

The end of the 1950s saw a renewed interest in the status of the mind and the role of the mental. Two papers in particular reintroduced the mind/body debate into mainstream metaphysics (a debate continuing today): J.J.C. Smart’s ‘Sensations and Brain Processes’ (1958) and Herbert Feigl’s ‘The ‘Mental’ and the ‘Physical’ (1958). The view propagated in these papers—and becoming key in the debates at the time—was known as ‘the mind/body identity theory’, ‘type physicalism’, and ‘the brain state theory’. Identity Theory made the mental completely physical – they were identical. It thus avoided the all-too-familiar pitfalls of Cartesian dualism, and was able to defend the claim that despite the apparent behavioural similarities, organisms might have different mental states. From this claim, one

could then deduce—as did indeed David Lewis (1972) and D.M. Armstrong (1968 in ch.3 of Lycan and Prinz 2008)—that mental terms are defined causally. Similarly, Type Physicalism—the type–type identification of the mental with the physical—was at the time a fresh and enticing theory that suited the optimistic scientific temper of the times. Its often implicit understanding of causality remains prevalent to many views of the mental till this day.

The brain-state theory, however, and perhaps surprisingly, turned out to be short-lived. The principal objection contributing most to its downfall was Hilary Putman’s argument of multiple realisation (1972). Putman argued that if pain (as an example of a mental state) is identical to a physical state, it must be identical to a *particular* physical state. For instance, human pain must be identified with C-fiber excitation. But not only does the neural substrata of mental events differ from person to person; it is also likely that other animals and non-carbon based creatures without C-fibers are in fact capable of experiencing pain. It is commonly held that Putman thus showed that any given mental state is ‘multiple realisable’ in various physical-biological structures; it is impossible to identify types of mental states with types of physical states.

In the wake of Putman’s multiple realisation argument, another attractive alternative theory of mind emerged, known as Functionalism – an approach that quickly became particularly attractive to the emerging cognitive sciences. The central premise of Functionalism was that mental states, rather than being physical states, are functional states. That is, mental states are equivalent to their functional role, and can therefore be realised by multiple systems. In this sense, mental properties turn out to be extrinsic or relational properties of the individuals that have them. The relation between mental properties and physical properties was one of ‘realisation’: mental states are realised in physical properties, though not definable by, reducible to, or identical with these. However, in the early stages of Functionalism, an account of the realisation relationship was lacking. During the 1970’s and -80’s, partly to fill this void, the idea of supervenience began to come to the fore. Supervenience denotes the ontological relation used to describe instances where lower-level properties determine its

higher level properties. This idea, it was often held, meets the need of the non-reductionist physicalist in search of a metaphysics of the mind, since it upholds the importance of the physical substrata and the primacy of the physical domain and its laws yet without implying physical reductionism. It was hence useful in formulating a general theory of lower-level to the higher-level determination of properties. Further, supervenience was compatible with the principle of multiple realisation, which as we have seen, became so important in Functionalism. However, the notion of supervenience failed to offer an explanatory account of the relation between the mental and the physical; it only describes patterns of property co-variations.

With strong reductionism out of favour, the notion of 'emergence' re-entered the debate, not only in mainstream philosophical writings¹³, but also in scientific literature.¹⁴ Theories of emergence attempt to explain how higher-level mental properties¹⁵ arise (emerge) from lower-level physical properties. This is a 'discontinuity theory' of consciousness or mind. The claim is that as a system gains complexity due to evolution, it takes on new powers and qualities emerge, giving rise to properties that are genuinely new and unlike anything discoverable in lower level physics. In other words, a mental property only comes into being on the basis of the most complex interactive process of multiple, less complex, subsystems. The main question that faces this view is 'in a previously non-conscious universe, what is it about the emergence of a particular biological function that suddenly "switches on the light of consciousness"?' (Velmans 2012, 134).¹⁶

In his paper 'The Mind-Body Problem: Taking Stock After Forty Years' (1997), Jaegwon Kim highlights one pivotal contribution the brain-state theory made that in fact outlived its short life as a theory of mind. Kim argued that the theory helped

¹³ For instance Searle (1992)

¹⁴ For example Varela, Thompson, and Rosch (1993).

¹⁵ Understood as intrinsic properties in their own right.

¹⁶ The ways around this problem that is currently being suggested by for example David Chalmers falls into that category of 'continuity theories' of consciousness. Their stance is that consciousness did not suddenly emerge at a certain stage of complexity, rather it is basic in the same way as matter.

establish the fundamental framework for the discourse that was to follow – that is, the broadly physicalist assumptions and aspirations that shape (and restrict) our thinking today. The debate has largely moved away from the fundamental metaphysical issues, deeming physicalism in principle fully capable of explaining the mind. Whatever notion of ‘mind’ we have left, then, is a kind of ‘mind-of-the-gaps’, a yet-to-be-resolved issue that will be explained as science proceeds along its staked-out path. As a result, dualism is no longer considered a serious option in mainstream philosophy of mind; physicalism has presumption in its favour. However, as will be discussed in the following, the difficulties that once sidelined dualism remain essentially the same—though in different guise—and still put forth a similarly daunting challenge to physicalism. The problem is now this: no longer Descartes’ problem of how a mental realm and a physical realm might interact, the mind/body problem has become a problem of finding a place—any place at all—for the mind and the mental in a world that is ultimately and essentially physical.

1.2 Physicalism – A starting Point and a Set of ‘Givens’

The current mainstream debate in philosophy of mind is underpinned by a set of assumptions that are taken as ‘given’ or as the ‘obvious’ starting point. A brief overview of these assumptions will provide a further basis for understanding the problems and suggested solutions at hand. As mentioned in the above, most of these basic assumptions are associated with various versions of physicalism, and include a commitment to a particular version of reality in terms of monism and specific notions of matter and causation. It is fair to say that physicalism (of some kind) or materialism has become the dominant position in philosophy of mind.¹⁷ However, attempting a precise formulation of physicalism is a difficult task. Traditionally, physicalism is the view that theoretical physics, as the most fundamental and complete of the sciences, holds a unique place with regard to the over-all scientific framework. For instance, J.C. Smart (1963, 651) defines it as there being ‘nothing in the world over and above those entities which are postulated by physics (or, of course, those entities which will be postulated by future and more adequate physical theories).’ Yet exactly what counts as *matter* is

¹⁷ This thesis uses physicalism and materialism interchangeably.

left somewhat vague.¹⁸ The operating understanding of matter seems to be rooted in Descartes's influential characterisation of material bodies as extended in time and space – *res extensa*. Of course Descartes' definition has been developed in modern science, but the view that matter is devoid of Aristotelian 'form' remains pervasive. The picture that emerges is one of a lump of matter whose primary qualities are its spatial properties – shape, size, locomotion (movement through space), and solidity—whereas secondary qualities such as colour, sounds, smells and tastes are held to be perceiver-dependent and not part of mind-independent reality, thus pushing the mind and consciousness to the fringes of reality. Primary qualities alone are held to be the basis for an object's causal powers, limiting causality to (in Aristotelian terms) material and efficient causes. The hallmark of understanding reality (on the lingering Cartesian view of matter) is hence to gain knowledge of how all the interlocking mechanical parts affect each other. This is a view of the physical realm as causally closed – 'when we are within the physical realm we find that every physical effect has a physical cause' (Papineau 2009, 54). If taken to the extreme, the implication of this claim is that '*anything that has a causal impact on the physical realm must itself be physical (italics original)*' (Papineau 2009, 54). In other words, it is held that everything within reality as described in physicalism is physically constituted. For example: for every mental property M, if anything has M, it has some physical property P that *necessitates* M. In other words, applied to the human being, our psychological character is wholly determined by our physical nature. Ontological primacy is given to the physical in relation to the mental. Now, this form of dependency or supervenience is not a sufficient definition of physicalism, since supervenience does not completely rule out the possibility of immaterial minds. Hence, an additional ontological claim is needed as to what objects exist in this world, namely that 'all that exists in this world are bits of matter in space-time and aggregate structures composed exclusively of bits of matter. There is nothing else in the spacetime world.' (Papineau in 2009, 54) What we are left with, then, is a kind of monist,

¹⁸ This sliding definition of 'the physical' is problematic as pointed out by Barbra Montero (2001) and David Chalmers, as it is possible that future hypothetical physicists will postulate non-physical features to reality. In which case it will no longer be 'physicalism' as commonly (albeit vaguely) understood in the contemporary debate and its distinction from dualism will be contrived. A similar point is made by Susan Schneider (2013) as proponents of non-reductive physicalism often omit discussing the nature of the physical spending all their energy on the 'psychophysical relation'.

materialistic view of reality.

Monism might be understood in many different ways, depending on the target (what the ultimate oneness is attributed to, e.g. God, reality, humans) and the unit (how the target is counted). According to monism the target is counted as one (by contrast, nihilism counts the target as none, whereas pluralism and dualism count the target as two or more (Schaffer 2009)). Another way to put this is to say that for monism, all concrete objects fall under one highest type (by contrast, Cartesian Dualism—or substance dualism—holds that concrete objects fall under *two* highest types, namely the ‘mental’ and the ‘material’). Although different kinds of monism are represented in current debates, the three main versions—Materialist, Idealist and Neutral Monism—are all versions of what we might call substance monism: everything that exists is—at the very basic level—made up of one single substance. Their differences lie in the disagreement over whether this one highest type is material, mental or something else. In the current debate, the dominant underpinning assumption is that of a physicalist substance monism: everything that exists is material, and everything that is material exists. A commitment to this kind of monism entails two further assumptions concerning reality in order to account for ‘the one and the many’: hierarchical levels of reality and reduction.

First, it is generally accepted that a commitment to monism on one (‘deepest’ or ultimate) level does not entail a commitment to monism on every other level. Hence, it is generally accepted as a given that the world comprises hierarchal levels of some form. As Kim (1997) points out, the notion of reality as ‘layered’ is not new – for instance, Cartesian substance dualism describes the world as being made up of two distinct substances, the mental and the material, each with its own characteristic defining properties (consciousness and spatial extension). Entities in each domain are involved in causal interaction with each other, but being separate ‘substances’ they are ontologically independent of those of the other, and it is metaphysically possible for one domain to occur in the total absence of the other. In substance dualism the two ‘layers’ are, in other words, considered to be ontologically distinct. By comparison, the layered view of reality found in contemporary materialism is rooted in substance monism, not dualism. Hence, the

relation between the layers must be more intimate, and also there must be some dependency of higher-level phenomena on the lower-level ones. The common view of this causal relationship between the layers has been one of bottom-up causality.¹⁹ Here the bottom level is normally considered to be composed of elementary particles – or whatever our best physics hypotheses are of the fundamental elements of matter from which all material things are made. As one moves up through the layers, complexity increases in both objects and their properties, so that we find atoms, molecules, cells, larger living organisms, and so on. Each special science not dealing with the elementary particles—such as biology or psychology—hence deals with some kind of higher-level object. In this view, then, the world consists of not just entities, but rather a hierarchy of entities located at distinct levels. Kim goes on to describe the relation between the layers:

The ordering relation that generates the hierarchical structure is the mereological relation: entities belonging to a given level, except those at the very bottom, have exhaustive decomposition, without remainder, into entities belonging to the lower levels. Entities at the lower levels have no significant proper parts.... For much of this century, a layered picture of the world has formed an omnipresent, if only implicit, background for the debates on the mind-body problem, emergence, reductionism, the status of special sciences and the like, and has exerted a powerful and pervasive influence on the way we formulate problems and discuss them (Jaegwon Kim 1998, 15).

Secondly, and following directly from the above, the monist commitment of physicalism has traditionally also implied some kind of reductionism. In light of the monist and physicalist commitments, reduction is often articulated as if all concrete entities might be understandable in scientific terms, thereby also implying a methodological unity of science. However, contemporary physicalism comes in various forms freeing it from such ‘positivist’ methodological commitments—one can for instance be a substance monist about concrete objects, but still be a dualist about properties or tokens²⁰—and it is not necessarily the case that everything should be studied exclusively by the methods found in physics (Papineau 2001). Today, however, physicalism is an ontological rather than a

¹⁹ The ideas of Systems Biology as presented by Denis Noble (2006) as well as the new/re-discovered view of thinking about causality are challenging this traditional view.

²⁰ This is the position the non-reductive physicalists hold as they argue all concrete individual objects in the world are material, but intricate physical systems can, and sometimes do, display properties that are not reducible to its physical substrata, e.g. mental properties cannot be reduced to physical properties.

methodological commitment; the contemporary discussion is concerned with the question of how or in what sense the mind (given that it exists) could be physical. Broadly speaking, the ontological commitment to the world being fundamentally physical has been articulated in two different ways that more or less shape the debate: reductive physicalism and non-reductive physicalism. The main difference between the two is their view of the reductive relation between the mental and the physical.

Reductive physicalism holds that mental properties are reducible to or reductively identifiable with neurological or physical properties. On this view, mental phenomena are accounted for solely by reference to the brain and its properties: 'sensations' and 'brain process' might differ in meaning but have the same ontological reference. The identity between the two is said to be uncovered as scientists gain more understanding of how the world is put together. A reductive physicalist believes that neuroscience will eventually—given time—gain enough understanding of the brain to reveal that properties we now designate using 'mental' terms (sad, bad, glad) actually are properties of the brain. However, the philosophers in question are often reluctant to offer any specific examples or particular identity claims—leaving this job to the scientist—seeing the philosophical task as offering an interpretation of scientific results. This version of reductive physicalism is better known as the Type-Identity Theory described earlier in this chapter, because it claims that types of mental events and properties and kinds are in fact identical to physical events, properties, and kinds.

Some philosophers reject this type of reductive physicalism as too ambitious and strong, they tend to support a version of so-called Token Physicalism. This is a form of non-reductive physicalism that claims that although mental types are not identical to physical types, each separate mental event or event-token is a physical event. Other philosophers, such as Paul and Patricia Churchland and Stephen Stich, hold that type-identity theory is not strong enough. Instead, they hold a view now commonly known as eliminativism: there are no beliefs, no desires, no intentions, no reasons for actions – all mental properties or events we talk of as real are, in fact, false and misguided. In other words, it is not enough to reduce mental states

and events to physical states; all talk of the mental must be eliminated and replaced with the new theory of the brain emerging in neuroscience. In the future, they assert, talk of desires and beliefs will be just as unscientific as talk of fairies, imps and vital forces are today.

The *non-reductive physicalist* position has been the most prominent and consensually held idea not only about the mind/body relation, but also regarding the relation between higher-level and their underlying lower-level properties in other fields as well. In short, it sees the psychological properties of a system as different from, and so irreducible to, its physical substrata. Kim (1993) summarises non-reductive physicalism, as it is commonly understood, in four claims: ontological physicalism (the spacetime world consists exclusively of bits of matter and their aggregates); irreducibility of the mental (mental properties are not reducible to physical properties); Mind/Body supervenience (mental properties supervene on physical properties); mental causal efficacy (mental properties are causally efficacious – that is they are sometimes causes of other events, both physical and mental). Consequently non-reductive physicalism claims that although humans are fundamentally physical beings, the highest level of our mental function cannot be exhaustively explained on the basis of lower level physical processes – however robust and intimate is the relation between mental properties and physical properties. What makes this a form of physicalism is its commitment to mind/body supervenience, which in this context implies ontological physicalism. Mental properties are determined by their physical substrata, giving the physical primacy both ontologically and explanatorily. Put crudely, supporters of non-reductive physicalism are allowed to have their cake and eat it too – some critics (Kim 1998; 1993; Chalmers 1996) argue that its attempts to pass as fully committed to physicalism fail. As they see it, non-reductive physicalism cannot help sliding into a problematic form of emergent dualism that actually results in radical causal emergence rather than a seamless slide (or rather rise) from matter to mind (Kim 1992).

While the jury is still out on the issue of the full ontological implications of reduction, physicalism is, generally speaking, a particular understanding of reality,

matter and causation. It has become the dominant starting position in contemporary philosophy of mind, so much so that Searle has called it 'the religion of our time' – being 'accepted without question and [providing] a framework within which other questions can be posed, addressed and answered' (Searle 2004, 33–34). However, as an ontological commitment it is not without problems. The next section takes a closer look at some of these problems. The advances in neuroscience, rather than settling the dispute in favour of physicalism, have made these problems even more acute (Bennett and Hacker 2003). The conundrums regarding the mind, consciousness and the experience of 'secondary qualities' – to mention only a few – are no less haunting than the 'ghost in a machine' of Cartesian dualism, as Gilbert Ryle rightly pointed out (2000 first published in 1949). In fact, the different ways of describing the relation between the mind and the body (or more often 'brain') from a physicalist stance face issues similar to those facing the allegedly rejected Cartesian view.

1.3. Three Ways of Understanding the Mind/Body Relation in the Current Debate

Eliminativism aside, *supervenience*, *realisation*, and *emergence* are the three most prominent and contested ideas among philosophers engaging the mind/body problem following in the wake of physicalism.²¹ The following will give a brief overview of these as they feature in contemporary philosophy of mind, both in how problems are cast and how solutions are attempted.

Supervenience denotes the idea that one set of properties (i.e. mental properties) is dependant (supervenies) on another set of properties (i.e. physical properties) in such a way that there can be no (mental) differences in one without (physical) differences in the other. It describes, then, an asymmetrical relation between two sets of properties. Ralph Wedgwood formalizes the supervenience relation as follows:

For every possible world w_1 , and for every individual x , if x has A at w_1 , then, for every possible world w_2 , and every individual y , if y has all and only the same physical properties at w_2 , as x has at w_1 , then y also has A at w_2 .
(Wedgwood 2000, 401)

²¹ For a further discussion and explanation of the three most influential ideas in current philosophy of mind and their implications see Kim (1997) and Van Gulick (2001).

The meaning of supervenience can also be described in the following manner: you might be able to give a complete neuromuscular explanation of raising your arm and moving your hand from side to side, but this explanation would not capture the fact that you are waving 'good bye' to a friend at the train station (or that you are possibly drowning). The neuromuscular explanation would systematically miss the cognitive, emotional, and social facts relating to the event. Yet without physically raising your hand and moving it from side to side, there is no wave at all. Thus the explanation of waving (or intention to wave) as a cause of subsequent effects on the on-going social interaction in question *supervenes* on the physiological (neuromuscular) causal explanation. In this sense, sentient creatures possess mental properties in virtue of their material properties. Since mental properties are dependent on physical properties, there is also a relation of determination between them, where the physical determines the mental, but crucially not vice versa. Since it is the physical substratum that determines, this implies that physical properties on this level are ontologically prior to, or more basic than, mental properties (Heil 2004).

Supervenience is shared by many (even mutually exclusive) mind/body theories, and only states a pattern of covariance rather than describing the nature of the relation between different layers. In other words, it points to the existence of a dependency relation between the two sets of properties but it is silent on the nature of that dependency relationship. Hence, even though strong supervenience is an important feature in the physicalist account of the mind/body problem, the physicalist conception of mental properties must include more, since supervenience does not itself provide any answers to the mind/body relations. In a sense, the mind/body problem is restated rather than solved (Kim 1997). One key contribution, however, is that by allowing mental properties to supervene on physical properties, but not the other way around, this approach allows for multiple realizability and indeed the notion of realization in general.

The notion of *realisation* attempts to give an explanation of the relation in mind/body supervenience. Kim describes the Functionalist conception of realisation as follows:

...mental properties are specified by causal roles, that is, in terms of causal relationships holding first-order physical properties (including biological and behavioural properties). In this sense, mental properties turn out to be extrinsic or relational properties of the individuals that have them. To be in a mental state is to be in a state with such-and-such as its typical causes and such-and-such as its typical effect (Kim 2000, 21).

The notion of realisability explains the mind/body relation/supervenience by construing mental properties as a second-order functional property with physical realisers. Having a mental state (M) consists in having the corresponding physical state (P). Thus having M is nothing over and above having P, meaning having a mental state is nothing over and above having one of its physical realisers. Thus the notion of realisation has also proved to be a possible form of ontological reduction (Putnam 1972; Fodor 1975). While the notion of realisation understands mental states as determined by their physical substrata—because they are linked by a second-order functional state—mental properties are not tied to the compositional or structural base properties. Mental states are multiply realisable, which means that consciousness and cognition are not restricted to a human body, or even a carbon-based organism; if another kind of physical object realises the relevant functional states, then that object will have consciousness, even though it does not have a human brain or body. As a result, this understanding of the mind/body relationship poses a fundamental challenge to the common understanding of human nature and its boundaries and distinctions.²²

So while the notion of realisation is an attempt to fill the explanatory gap in the general idea of supervenience (rather than merely describing the problem) it does not really succeed. It is unclear how it is that conscious experiences are identical to

²² 'Suppose we arrange a sequence of creatures starting with ourselves and ordering them in terms of degrees of difference from human neurophysiology and functional organization. Functionalists are already committed to the idea that creatures physically different to us can be mentally, even consciously, like us nevertheless. But not only are physical differences allowed, it's clear that we can't demand complete and exact functional identity either. After all, there are many levels of functional organization underlying human psychological capacities, each implementing the level above it, and bottoming out with the neural mechanisms that implement the entire hierarchy. There is also an enormous range of psychological capacities that interact with each other, some of which can differ from creature to creature while others stay the same. So assuming we have some sequence of creatures with increasing difference from normal humans, at which point, even roughly, do we say that the conscious experiences are no longer similar to our own? What can give us even a clue how to answer this question?' (Levine in McLaughlin, Beckermann, and Walter 2009, 285)

functional states. So while the notion of realism commits to a physicalist stance by making the physical substrata the determining factor, because the notion of functional states uncouples mental states from a particular kind of body or structure (making it multiply realisable) it simultaneously appears to devalue the particularity of a body and the way the form and make-up of a being/organism shapes its consciousness and cognition.

Like the concept of realisation, the notion of *emergence* is concerned with the nature of the correlation of mental phenomena and physical phenomena. Kim (2006) defines it in the following manner: ‘...when aggregates of material particles attain an appropriate level of structural complexity (‘relatedness’), genuinely novel properties emerge to characterise these systems.’ In short, emergent properties are held to be not explainable in terms of their emergent base: that is, they are not reducible to the underlying conditions from which they emerge. This is fundamentally different from mechanical properties, which can be fully understood and predicted on the basis of their constituents. Further, emergentists also hold that emergent properties have the capability to exert causal powers influencing lower-level events and processes. This is known as the theory of top-down causation. This theory has vital importance for proponents of emergentism, since without it there would be little value in claiming the existence of mental properties at all. The theory of emergence is compatible with both a fundamental physicalist ontology and the supervenience of higher-level properties on the lower-level ones, and should be considered a variant of non-reductive physicalism.

While all of these dominant approaches provide interesting and rich ways to approach the problem of co-variation between mental and physical events, none of them succeed in providing a robust account of the nature of their relation or the ontological status of the mind per se. In fact, as was noted in the above, they might arguably be seen as variations over the theme of the ‘interaction problem’ haunting Descartes’s (rejected) substance dualism. Instead of solving the Cartesian problem, they have thrown up a range of new problems, the following section will consider some, particular to variants of the underlying physicalist or materialist monism. It will give a concise description of four main problem areas in

contemporary philosophy of mind, all of which contribute to the apparent dead-end status quo.

1.4 Four Pressing Problems in Philosophy of Mind Today

The problem of finding a place for the mind and the mental in an ultimately physical world can be divided into four categories: the problem of causation, which is concerned with issues such as the classic mind/body problem, top-down causation and over-determination; the problem of reduction, which addresses the nature of reduction and the irreducibility of consciousness and qualia; the problem of self, where issues regarding the experience of self and personal identity are addressed; and finally the problem of the external, where the problems of the external world, perception and other minds are the subject matter.

Problem 1: The Problem of Mental Causation

The problem of mental causation is largely the same Cartesian mind/body problem manifesting at a different level; how do mental processes influence physical ones? Reductive approaches give bottom-up explanations to mental causation. In order to avoid such reduction, the most common held view today—non-reductive physicalism—asserts the autonomy of mental states and thus also the possibility of top-down causation; mental properties also have causal influence. Consider one case of mental-to-mental causation: suppose that the instantiation of mental property M_1 (which supervenes on some physical property P_1) causes the instantiation of another mental property M_2 . Given the assumption of supervenience, M_2 supervenes on some physical property P_2 , which realises M_2 . To the non-reductive physicalist the only sensible answer seems to be: M_1 caused the instantiation of M_2 by causing the instantiation of P_2 . Hence, the non-reductive physicalist is committed to assuming that cases of mental-to-mental causation presuppose top-down causation, i.e. the possibility of mental-to-physical causation. The highest level of operation of a complex system creates top-down influences (or constraints) on the lower, microscopic levels, but crucially without violating lawful relationships at the lower level (i.e. M_1 causes M_2 and P_2 , but P_1 *also* causes P_2). Thus, processes of thinking, deciding and acting create top-down influences on the very brain systems whose activity constitutes the processes of thinking and deciding.

Precisely at this point, however, Kim has challenged the viability of contemporary non-reductive physicalism via two increasingly refined arguments: the downward causation and causal exclusion arguments. Kim's main claim is that non-reductive physicalism violates the causal closure of the physical world. Kim argues that upward and same-level causation in fact both involve downward causation. Consider a mental property M_1 that causes another property M_2 . Since M_2 is a mental property, by hypothesis it has an emergence base on which it supervenes, P_2 . Kim sees a tension in this situation because there appears to be two answers to why M_2 is instantiated: First, M_2 is instantiated because M_1 caused it; second, M_2 must of nomological necessity be instantiated because its emergence base, P_2 , is present. Thus, Kim rightly points out two competing causes for the instantiation of M_2 , jeopardising M_1 's causal responsibility for M_2 . Yet there is another obvious third; since physics provides a full explanation of physical events, P_2 can equally be caused by P_1 . He suggests that to preserve M_1 's causal responsibility for M_2 , we must suppose that M_1 causes M_2 via causing its emergence base P_2 . This gives us a general principle: that we can cause a supervenient (and hence emergent)

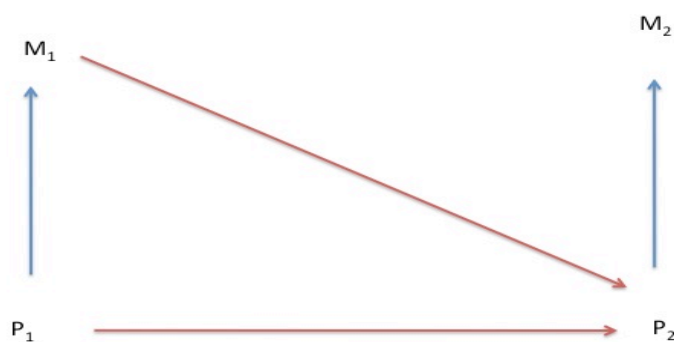


Fig. 1

property only by causing its emergence base (see figure 1).

In other words, if mental properties are causally efficacious, it seems they must

either be identical to physical properties, or there must be widespread overdetermination. The latter is often held to be unlikely or even impossible on conceptual grounds. Thus there is still no satisfying explanation as to how mental properties can influence physical processes. For some, then, the problem of causation is the weak spot in non-reductive physicalism, since the alternatives to overdetermination seem to be either reduction or elimination.²³

Problem 2: The Problem of Reduction

The problem of reduction has at least two facets. The first concerns the ambiguity surrounding the idea of reduction, the second concerns the irreducibility of consciousness and qualia. The first of these, the question of the ambiguous notion of reduction, further develops in two principal dimensions: the types of items that are reductively linked, and the nature of the link between these.²⁴ In the first of these, we must distinguish between *types* and *tokens*. A token is a particular entity, the specific cup of tea on your desk or one particular performance of Bach's cello suite No.1. A type is an abstract representation. Now, some philosophers identify a type with collections or classes. On this view, a type is the class containing every token of the type. So, for instance, a class would include all the cups of tea or all the different performances of Bach's cello suite No.1 that exist in the world. Others take types to be universals; that is, properties that can be wholly present in different places at once. In any case, in both views a type is an abstract representation. Thus, one can point out a token of a type, since it is something particular in the world. But one cannot point out a type. Along the first dimension—which asks about the types of items that are reductively linked—reduction might on the one hand refer to a relation between *real-world* items (tokens) such as objects, properties, events and processes. This is known as ontological reduction (ONT-reduction) (Van Gulick 2001). On the other hand, it might refer to a relation between *representational* items (types) such as concepts, theories, models and frameworks. This is known as Representational reduction (REP-reduction). Hence, how one understands the problem of multiple realisation

²³ But only seemingly so—this thesis seeks to challenge the view that these options exhaust the range of available possibilities.

²⁴ Here I follow Van Gulick (2001), Heil (2004), and Searle (1992).

depends on whether one holds mental states to be types or tokens²⁵ and what stance one takes towards 'type identity' solutions to the mind/body problem.

The second dimension concerns the nature of the link between items that are reductively linked. There are several approaches within this field, and they can only be listed very briefly here. Within the horizon of ONT-reduction, there are at least five commonly campaigned viewpoints as to how ONT-reduction might be manifest: elimination; identity; composition; supervenience; and realisation. A common feature in these approaches is the basic idea that objects of certain types can be shown to ultimately be nothing but objects of other types. Similarly, within the horizon of REP-reduction, there are five recognizable categories into which most approaches can be placed: replacement; theoretical-derivational: *a priori* conceptual necessitation; expressive equivalence; and teleo-pragmatic equivalence. In the case of REP-reduction, the nature of the link of reduction will generally involve some equivalence in terms of what objects can or do represent as opposed to a mere correspondence in their form or intrinsic properties. Here, the fundamental idea is that one representational item reduces to another *only if* the first is related to the second in terms of what it can or does say about the world and its properties.

The second facet of the problem of reduction concerns the irreducibility of consciousness and qualia. Here, the argumentation most often used for showing the irreducibility of mental properties, consciousness and qualia²⁵ is based on a *modus tollens inference*.

1. If (A) my phenomenological experience of red was equivalent with some set of empirically observable brain states, then (B) the complete empirical data would constitute complete knowledge of the phenomenal experience.
2. But it is *not* the case that (B) complete empirical knowledge would capture the phenomenological experience.

²⁵ Multiple realization is the thesis that the same mental property, state or event can be implemented by different physical properties, states or events. It was used in the 1950s and -60s by Hilary Putnam and Jerry Fodor as an argument against reductionism. For further reading see Putnam (1972), Fodor, Jerry (1975), and Kim (in Heil 2004).

3. Therefore it is *not* the case that (A) phenomenological experience is equivalent to the empirical observable process.

The inference is itself logically valid, so the discussion has been concerned with the validity of premise 2. Critics such as Dennett (1996) and Churchland (1985) deny the truth of premise 2, and instead argue that the empirical observable physical process is in fact a complete description of reality. On the other hand, several thought experiments have been presented in order to exemplify the validity of premise 2—that phenomenological experience or mental properties are more than physical processes—such as the story of the two scientists mentioned by Ralph Ellis (2000, 176) researching the state of ‘being in love’, where only one of them has ever ‘been in love’ and the other has not. The scientist who has never ‘been in love’ might have complete knowledge of the physical processes involved, but still lacks the experience of ‘being in love’, and is therefore lacking an important aspect of knowledge concerning the nature of ‘being in love’. Ellis’ concludes with the following:

There are properties of certain physical processes that are not empirically observable (i.e. from an objective and external vantage point), and these properties are not reducible to (i.e. are not the same thing as) those aspects of the same processes that are empirically observable (Ellis 2000, 177).

Chalmers (2004) calls this the hard problem of consciousness: the fact that every experience has a qualitative ‘feel’ to it. In addition to the physical process there is ‘something it is like to be’; or what in more philosophical terms is referred to as *qualia*.

Problem 3: The Problem of the Self and Personal Identity

The closely related problem of self and personal identity deals with a specific set of problems related to consciousness or experience, in particular the sense in which these include a distinct ‘subjective’ element. Every experience evidently incorporates a ‘point of view’; there is an ‘I’ who experiences the world. It seems that everyone (though such claims are impossible to prove) seems to know what their self is, and experience a sense of self – that underneath the concept of ‘I’ there is something it is like to be *me*. The philosophical problem of the self stems from

this sense of self and our difficulty in defining what this phenomenological viewpoint must be. Galen Strawson (1999) describes the problem of self in terms of four questions, starting with the phenomenological one just mentioned. Strawson argues that this question is best divided into two, in the first instance taking it as a question explicitly concerning human beings: (1) what is the nature of the human sense of the self? When this question is answered, a general phenomenological question arises: (2) are there other possibilities, when it comes to a sense of self?, or, in other words, can we describe the minimal case of genuine possession of a sense of the self? The answers to question (1) and (2) further lead to the condition question: (3) what are the grounds or preconditions of possessing a sense of self? Strawson acknowledges that question (3) further raises a vast array of secondary questions. However, he holds that if one can produce satisfactory answers to (1), (2) and (3), then one has a good chance of being able to answer the factual question, the fundamental and straightforwardly metaphysical question: (4) is there (or could there be) such a thing as the self?

But the metaphysical question (4) that Strawson suggests will be easy to answer once questions (1) – (3) are resolved might not be as straightforward as he makes it look. As we have seen, the ontology framing the current debate is already struggling (and failing) to make sense of the mind and consciousness; it is hard to believe that it will do any better with the self, however well questions (1)-(3) are answered by phenomenology. Indeed, some philosophers, such as Anthony Kenny and Erik T. Olsen, dismiss the problem of self as unintelligible in the first place. Kenny (1988, 4) says that the essence of the theory of self pivots on a grammatical error. He maintains that ‘“the self” is a piece of philosophers’ nonsense consisting in a misunderstanding of the reflexive pronoun’. Similarly, Olsen—after considering the array of different responses one might give (he himself provides no less than eight) to the question ‘what is the self?’²⁶—concludes by saying:

It should be equally clear that there is no one single thing – no single idea [of

²⁶ (1) One’s self is the unchanging, simple substance to which one’s impressions and ideas have reference. (2) One’s self is the inner subject of one’s conscious experiences. (3) One’s self is just that person, himself. (4) One’s self is that indescribable and unidentifiable private, inner being within one. (5) One’s self is what one values above all else. (6) One’s self is the unconscious mechanism responsible for the unity of one’s consciousness. (7) One’s self is a psychological or behavioural attribute of one. (8) One’s self is an aggregate of or construction out of one’s sense-experiences.

the self] – that all these accounts could reasonably be seen as trying to capture... I conclude that those who use the word 'self', if they are saying anything coherent at all, must be talking about completely different things. Thus, there is no such idea as the idea of the self, and therefore nothing for the 'problem of the self' to be a problem about (Olsen 1999, 55).

Strawson to some extent agrees with the claim that what we call 'problems of the self' are really problem of other things, such as personal identity²⁷, semantics²⁸, philosophy of mind²⁹, moral psychology³⁰, cognitive psychology³¹ or epistemology³². However, he maintains that even if one was able to give a full account in all these areas, it is still unclear how this would resolve the 'problem of self'; there might still be an aspect of the self that is unaccounted for. In summary, in philosophy of mind the problem of self is not only about the phenomenology of the self or its ontological status. Part of the problem is discerning whether it is a problem in its own right in the first place, or if it is ultimately usurped by other 'real' problems, such as the problem of the mind or personal identity.

Problem 4: The Problem of Other Minds, Perception and the External World

The questions surrounding the problem of perception, the external world and other minds are intimately related in that they all ultimately deal with what reality is (ontology) and how we come to know it is so (epistemology). What is reality really like? And in which way (if any) is our view on reality-out-there, influenced by our mental contents-in-here (i.e. mind/brain)? What is the relation between our inner sensory perceptions on the one hand, and the world existing apart from our perceptions—including the minds of others—on the other? Furthermore, how can we be sure that our sensory representations of the external world are reliable? The following will consider these and similar questions as they unfold in a context

²⁷ What makes up me? How does my identity persist over time? What makes up my identity? How is it realized in the brain?

²⁸ What are the semantic properties of first-person pronouns such as 'I'? How and to who do they refer, if they refer at all?

²⁹ To what extent are we aware of what goes on in our own mind? How is the mental realized in the brain?

³⁰ What makes a project, belief, value, pattern of behaviour, or personality trait autonomous or authentic, fully one's own and not merely the result of our upbringing or peer-pressure? How do these issues connect to moral responsibility?

³¹ What is involved in forms of reflexive conduct such as knowing one's own mind, in the sense of having settled, consistent and realistic intentions?

³² What is knowledge from a first person perspective? How do we get knowledge of our own psychological states?

quite relevant to this thesis – that of knowing other minds.

The common (often implicit) distinction made between 1st and 3rd person perspectives, and the tendency to assign greater importance to one over the other, makes it hard to navigate when discussing the issues at stake. We might say that the 1st person perspective is the subjective ‘view from within’. It is the private *experience* of being a perceiving, conscious, thinking, feeling self that only the person experiencing has access to. By contrast, the 3rd person perspective is the descriptive ‘view from without’. This perspective is often equalled to the ‘objective’ descriptions provided and produced in science, where—although human agents make the descriptions—the contents of the descriptions are not clearly linked to the specific human agent making them. Some have argued that the inevitable subjective-social element of the ‘objective’ descriptions in science is thereby concealed within the social practices of science (Varela and Shear 1999, 1–3). But this understanding of the 3rd person perspective as a scientifically construed ‘objective’ and impartial view is too narrow. What I know about my husband’s mental states, I will always—however long we have been married—know from an outside perspective. Only he will have the 1st person’s perspective on his inner workings. To know about other people’s mental states we must know what they do and how they act or ask them to tell us. No such mediation seems to be needed in our own case; on this account, then, we have a direct knowledge of our own mental states in a manner that others do not.

Descartes (in)famously described the mind as transparent to itself and as the point of certainty. His reason for assuming so followed these now familiar lines: because we cannot doubt our own doubts, and because doubting is a kind of thinking, we know that the mind is there. In other words, our awareness of our own acts of thinking provides us with knowledge about mental states more certain than our knowledge concerning anything else. Furthermore, thinking cannot take place in our mind without us being aware of it. Consequently, because we know all our own thoughts and the mind is a ‘thinking thing’, the mind is transparent to itself. But how, when we know our own mental states by direct access to our mind, do we know the mental states of others or indeed if they have minds at all? Descartes’

reaction to this difficulty is to reason that our bodies—being physical ‘things’—obey the laws of physics, and therefore we can by observation predict and explain a lot of behaviour on the basis of those laws. However, according to Descartes some aspects of human behaviour (most notably speech) are unpredictable and inexplicable by the laws of Physics, since they express thinking. If speech is expression of thought, then we can infer that others must also have minds (Rosenthal 1991, 16–17).

There is a general consensus that my mind and your mind are essentially the same kind of ‘thing’ or in the same mode of existence—whatever that might be. The main point of contention is the question of how we know our own mind versus how we know other minds. In contrast to Descartes, Bertrand Russell approaches the problem of other minds reasoning from causal connections between mental and bodily events. Russell appeals to analogy: by knowing our own connections between mental states and bodily action, we by analogy infer the mental state of others when observing their behaviour:

The behaviour of other people is in many ways analogous to our own, and we suppose it must have analogous causes...If we are to believe that there are thoughts and feelings other than our own, that must be in virtue of some inference in which our own thoughts and feelings are relevant, and such an inference must go beyond what is needed in physics (Russell 1948, 482–486).

Similarly to Russell, P.F. Strawson insists we attribute mental states to others on the basis of behavioural clues. We apply our concepts of mental states according to how others appear and behave. If it was not so, then we would have no independent way of relating the mental states of others to the behaviour that normally correlates to them. Further, Strawson claims that we similarly ascribe mental states to ourselves, even though behavioural clues do not make up part of such ascriptions (1991, 85).

Others, such as Searle, do not find analogy a convincing hypothesis as to how we can understand other minds. He notes that:

In general, it is a requirement on inferential knowledge that if the knowledge claim is to be valid, there must be, in principle, some independent or noninferential way to check the inference...But if I make an inference from

your stimulus and your behaviour to your mental states, how can I ever check the inference? (Searle 2004, 13)

He goes on to say that if he were

...to take it to be a kind of scientific hypothesis testable by scientific methods, whether or not you have mental states corresponding to your observable stimulus and response patterns, in the same way that I have mental states corresponding to my stimulus and response patterns, then it seems that what the argument proves is that I am the only person in the world that has any mental states at all (Searle 2004, 13).

Even though Searle is correct in stating that when analogously inferring from behavioural cues the mental states of other minds we will not be able to directly verify the inference like we can do when ascribing mental states to our self, Searle is arguably wrong in asserting that the 'argument of analogy' inevitably leads to some kind of solipsism. The reason is that the question of whether it is possible to use 'scientific methods' in order to gain access to other people's mental states and verifying the inferences in the same way one would verify one's own inner state is not really what is at stake. Whether one uses 3rd person quantitative approaches to investigate the inner states of other minds or one's own 1st person inner state as a reference point, one has in either case from the start objectified the other minds in question. Put another way, it is simply possible to ask the person in question if one's inference is correct.

In summary, the dominant commitment to various versions of materialist or physicalist monism in contemporary philosophy of mind leaves major questions regarding the nature of the mind as confounding as they were for Descartes. Two questions here are first the problem of mental causation and the interaction between the mental and physical—which cannot be 'functionalized away'³³—and secondly the so-called 'hard' problem of consciousness – equally resistant to any solely functionalist approach. Equally, these problems cannot simply be dismissed as trivial, easily resolved when the sciences improve and progress. As Edmund Feser summarizes it:

³³ 'Functional roles are causal roles, and the functional roles characteristic of mental states include psychophysical causal relations. The problem of mental causation is a challenge to functionalism, not a puzzle that can be resolved by appealing to functionalism' Ravenscroft in (2011, 33).

In short, science has “explained” the sensible qualities and meaning that seem to common sense to exist in reality only by sweeping them under the rug of the mind; that is, it hasn’t really explained them at all, but merely put off any explanation by relocating them out of the physical and into the mental realm. There they remain, however, forming a considerable bump under the rug – one that seemingly cannot be removed by further scientific sweeping. (Feser 2006, 77)³⁴

In light of the problems facing a physicalist stance it is fair to say that the commitment to physicalism in philosophy of mind is in many respects waning. There are an increasing number of eminent philosophers who either straight out reject materialism or have expressed strong sympathies with anti-materialist claims.³⁵ This is not to say that it will be eclipsed imminently, but rather it can no longer escape the burden of proof.

Taking Stock

Having considered the dominant ideas and the problems that are at the crux of the debate, it is time to take stock and see where contemporary philosophy of mind finds itself. Physicalism has over the last sixty years or so become the leading position in academic philosophy, being ‘a readily intelligible monistic worldview, appealing in its apparent simplicity, and a natural complement to the impressive ongoing successes in the natural sciences’ (Koons and Bealer 2010, v). Yet at the moment, all options on the table have deeply unsatisfactory aspects to them, and each only resolves parts of the puzzle, leaving the overall picture as—not to say more—complicated and confusing as ever. Heil succinctly summarizes, as noted earlier, what has become the general stance for many:

...Perhaps what we need is something completely different. But what could this something be? The usual suspects – materialism, dualism, idealism –

³⁴ For further detailed accounts on the current debate in Philosophy of Mind see James Garvey (2011)—in particular chapter 1 by Ian Ravenscroft and chapter 13 by Paul Noordhof—and Heil (2004).

³⁵ Koons and Bealer include the following list of names (according to their birth) as a sample of mainstream philosophers who have ‘either rejected materialism or harbored serious and specific doubts about its ultimate viability’; Bertrand Russell, Rudolf Carnap, Alonzo Church, Kurt Godel, Nelson Goodman, Paul Grice, Stuart Hampshire, Roderick Chisholm, Benson Mates, Peter Strawson, Hilary Putman, John Searle, Jerrold Katz, Alvin Plantinga, Charles Parsons, Jaegwon Kim, George Myro, Thomas Nagel, Robert Adams, Hugh Mellor, Saul Kripke, Eli Hirsch, Ernest Sosa, Stephen Schiffer, Bas van Fraassen, John McDowell, Nancy Cartwright, Bob Hale, Kit Fine, Tyler Burge, Terence Horgan, Colin McGinn, Robert Brandom, Nathan Salmon, Joseph Levine, Timothy Williamson, Mark Johnston, Paul Boghossian, Stephen Yablo, Joseph Almog, Keith DeRose, Tim Crane, John Hawthorne, Richard Heck, David Chalmers’ (2010, v).

apparently exhausts the space of possibilities. To be sure, what we can grasp as possibilities depends in some measure on us. Just as early hominids could not have made sense of possibilities envisaged in modern physics, so we, sophisticated as we are, might be in no position to recognise possibilities that would strike neuroscientists in the distant future as laughably obvious. (Heil 2004, 757)

This paragraph highlights two assumptions that this thesis maintains underpin the sense of a dead-end characterizing contemporary philosophy of mind. The first assumption is that materialism, dualism and idealism exhaust the space of possibilities; the second is the commitment to experimental science as having definitional authority as regards what reality is (the so called scientism), and that given time science will produce some ‘laughably obvious’ answer to current problems.³⁶ The commitment to science as definer of reality is indeed—as Barbara Montero (2001) points out—one of the things Searle and Churchland have in common, despite their radically different views on the mind; both rely on science in their definition of *what counts as physical*. They, like most other physicalists, adhere to Wilfred Sellars’ (1963, 173) well-known quote ‘in the dimension of describing and explaining the world, science is the measure of all things, of what is that it is, and of what is not that it is not’. This kind of reliance on science in general and physics in particular to define what is physical, paired with the common lack of commitment to any *specific* scientific theory, makes it seem that all physicalists are ultimately asserting is that any phenomenon that is a real occurrence in the world is essentially explainable by science – even if this should be a science whose mode of operation might be very different from any of our currently known sciences. Physicalism has covered its back, so to speak. Montero articulates it in the following manner:

... The strategy of simply siding with science, whatever science may ultimately say, is so safe as to bestow physicalism with what Popper thought was the very unscientific virtue of being, even in principle, unfalsifiable... it seems that without any restrictions on how the science in question is to progress, or on what entities and properties it is to incorporate, physicalism, that is the view that everything is physical, becomes not only unfalsifiable, but also trivial

³⁶ Now, it should perhaps be pointed out that to question this commitment is not ‘anti-scientific’ – rather it is a questioning of what Tallis describes as ‘scientism’. ‘The mistaken belief that the natural sciences (physics, chemistry, biology and their derivatives) can or will give a complete description and even explanation of everything, including human life’ (Tallis 2011, 15) and pointing out that the problems at hand are riddled with conceptual confusion.

(Montero 2001, 63).

As long as one defines the physical in relation to whatever our best physics tells us about the world, the problem of what it means to be physical, especially in the context of the mind/body problem will remain problematic.

In any case, rather than ‘exhausting the space of possibilities’, this thesis will maintain that materialism, dualism and idealism as currently understood in the debate share a set of underlying assumptions concerning reality, matter, causation and the mind. It does indeed *seem* as if they exhaust all logical possibilities. But in fact, they are merely three options that exhaust the alternatives within what this thesis calls the Cartesian framework. The Cartesian framework, as described in this thesis, is based on the supposed divide between the material and the non-material aspects of reality. Physicalism, for instance, is defined and understood on the basis of dualism. It is not a self-sufficient framework, but exists as a negation to and in relation to the other options *within* the Cartesian framework. As Charles Taylor put it, the most common notion of materialism in philosophy

... starts out from the old (Cartesian or empiricist) dualism, whereby there were distinguished two kinds of substance or stuff, the material and the mental. Starting from this point, the thesis of materialism is simply the denial of one term of this dualism. The ghostly is refused any ontological status, and all the phenomena, which led to its being postulated are explained in terms of matter (Taylor 1969, 73).

We might say that the views found within the Cartesian framework are situated along a single continuum with dualism at the centre—substance dualism located at the most central point—and with a kind of monism on each side. On one side, Eliminativist Materialism denies all of dualism’s mental aspects, retaining only its concept of matter; on the other side, idealism denies all of dualism’s material aspects, retaining only its concept of the mental. Most theories of mind with origin in a modern Western context can be placed somewhere along this continuum, all in one way or another attempting to solve the problem of the divide between the 1st and 3rd person perspective on reality. Materialism, dualism and idealism are all

points on the same continuum.³⁷

Thus I agree—to some extent—with Heil that what we grasp as possibilities depends in some measure on ourselves. But this is not solely or even primarily because of our evolutionary short-comings or primitive understanding of science (though I am sure we have plenty of room for improvement, despite my reluctance to cast all my worries on science’s promise of inevitable progress). Rather, what is at stake—what limits our conceptual horizon—is the shared underlying framework that shapes and limits all of the preceived options listed by Heil. What Vadim V. Vasilyev calls for is a retrieval of conceptual analysis;

To understand what kind of changes we need, we should realize that we must save conceptual analysis...But our idea of conceptual analysis has to be revised. In the twentieth century, conceptual analysis was understood mostly as the analysis of word usage. But such analysis is inevitably superficial. To avoid this danger, we should analyze deep conceptual schemes, produced by our natural beliefs. (Vasilyev 2013, 17)

This thesis is an attempt to do precisely that. Hence, one of the first things that needs to be considered if we are to come to a better understanding of human nature and all that entails, is how to loosen up the conceptual tangle we find ourselves in. How can we come to think otherwise? How can we think outside of a frame that seems to be ‘just so’?

In response to such questions, the next part of this thesis has two aims; first to give an outline of the Cartesian framework and its features; and secondly to show—by way of a historical diagnosis—that the mind/body problem and the particular assumptions that shape its various articulations in contemporary philosophy of mind do not necessarily reflect something timeless or trans-cultural – nor something only solveable through further millenia of progressive (and, assumedly, universal and global) evolution of the human capacities for thought. Instead, the mind/body problem—in all its various contemporary articulations—belongs to a particular historical (and geographical) context, where its tangles and knots are largely philosophers’ own doing.

³⁷ P.M.S. Hacker (2007, 27) has a diagram that illustrates how the current position has its roots in Cartesian Dualism.

Part Two

The Cartesian Framework:

Its Basic Assumptions and Historical Development

–You used to be much more... 'muchier'. You've lost your muchness!

The Mad Hatter in Tim Burton's *Alice in Wonderland* (2010)

A Turning Point

As we have seen, contemporary philosophy of mind generally dismisses Cartesian dualism; yet Cartesian fundamental assumptions continue to assert strong influence on the debate, shaping the way in which crucial concepts such as reality, matter, causation and the mind are understood. Indeed, current materialism can be seen as an impoverished version of Cartesian dualism, and hence facing essentially the same problems. Now, calling this a 'Cartesian' framework is admittedly somewhat arbitrary, and it is definitely not meant to suggest that René Descartes himself is to blame for all our troubles. However, there is no question that certain aspects of his philosophy, or the way he is portrayed by his critics at least, mark a distinct shift or perhaps a culmination—both his ideas and the methods he uses to derive these— and this makes his philosophy a natural (and in fact quite common) place to draw an imaginary line or watershed. Although the structure of Descartes' epistemology, theory of mind and theory of matter have been discarded, their clarity and initial persuasiveness make him a principal point of reference for modern philosophy. In short, one might argue that a majority of the subsequent Western philosophy is a response to his writings.³⁸

³⁸ See for instance Zizek in *The Ticklish Subject*; 'A specter is haunting Western academia...the specter of the Cartesian subject. All academic powers have entered a holy alliance to exorcise this specter; the New Age obscurantist (who wants to supersede the 'Cartesian paradigm' toward a holistic approach) and the postmodern deconstructionist (for whom the Cartesian subject is a discursive fiction, and effect of decentered textual mechanisms); the Habermasian theorist of communication (who insists on a shift from Cartesian monadological subjectivity to discursive intersubjectivity) and the Heideggerian

While most will argue that Cartesian dualism is a way of thinking about reality and human nature we have long put behind us (and rightly so), some recognise the influence it still asserts, because it is still present in the conceptual framework that shapes our understanding of reality. Indeed, it is, as the first section of this thesis has argued; it is the culprit of the stalemate situation of philosophy of mind. Its view of reality, in the Cartesian framework, is highly problematic and hindering conceptual development not only in philosophy of mind, but also in conjunctive fields such as neuroscience and psychology. But though there are many critics, it is rarely clear precisely what we mean by the term 'Cartesian framework'. This part hence seeks to provide a more precise description and historical diagnosis of the framework and its defining characteristics.

Chapter 2 examines the features of the Cartesian framework and its (furtive) presence in contemporary debates. It seeks to articulate the precise problems inherent in the framework as clearly as possible. Only in this way might we be able to reframe questions beyond its remit. Furthermore, no philosophical problem can be sufficiently understood without considering its historical development. Obviously, it is impossible for present purposes (and possibly at all) to offer an exhaustive description of any such metaphysical framework—it being a complex matrix of interrelated beliefs, attitudes, assumptions, givens, and stories, incorporating both data and theory. It would compare to counting the stars. What this section is however attempting to do, is to point out some particularly prominent features and constellations of ideas that distinguish this particular framework, and highlight some of the aspects of Descartes' work that have been

proponent of the thought of Being (who stresses the need to "traverse" the horizon of modern subjectivity culminating in current raging nihilism); the cognitive scientist (who endeavors to prove empirically that there is no unique sense of Self, just a pandemonium of competing forces) and the Deep Ecologist (who blames Cartesian mechanistic materialism for proving the philosophical foundation of the ruthless exploitation of nature); the critical (post-)Marxist (who insists that the illusory freedom of the bourgeois subject is rooted in class division) and the feminist (who emphasizes that the allegedly sexless cogito is in fact a male patriarchal formation). Where is the academic orientation that has not been accused by its opponents of not yet properly disowning the Cartesian heritage? And which is not hurled back the branding reproach of Cartesian subjectivity against a "radical" crisis, as well as its "reactionary" adversities.' (Zizek 1999, 1) Others who make similar points are Smith (2004) and Hacking (2005).

formative in philosophy (and by implication other sciences) till today, and finally how these features are increasingly seen as problematic.

Chapter 3 provides a set of genealogies where the central features of the Cartesian framework are cast into relief. The point of considering their historical development is not to suggest that there is some kind of hierarchy or linear causal relation between ideas or concepts, so that ideas could simply be added to each other as (conceptual) pearls on a (historical) string. It might be more fitting to compare it to a web, or perhaps a scaffolding, within which modern sciences and philosophies have been upheld while mutating and changing. Here, it is hoped, a historicising of selected elements of the framework itself might help open our view to metaphysical frameworks that are truly alternative – new scaffoldings, so to speak.

2. The Cartesian Common Ground of the Contemporary Debate

Let us be as clear as possible: in the story that follows, René Descartes is not the villain. He wrote on, and made significant contribution to, many other subjects such as analytical geometry, the physiology of the human eye, digestive systems and limb reflexes, as well as important work on meteorology (the study of weather). He is reported to have been the first to suggest the correct account of the nature of rainbows. His scientific rigour laid the foundations for investigations in empirical psychology for the next three centuries (Lyons 2001, 2–5). However, he has also played a big role in shaping today's philosophy of mind (Rorty 1979), and here, his contributions have been less helpful in the long run. The concept of mind exemplified by and articulated in Descartes's work is distinct from any earlier notion in ancient and medieval philosophy, its most significant feature being that the mind is a substance, able to exist apart from the body and is subject to its own principles. His account—to be fair, often a caricatured version—now serves as a laughing stock set in opposition to the 'common sense' of contemporary materialism. The distinction between the caricature of Cartesian dualism and materialism is however not as prominent as first thought. Materialism is not faring any better than the dualism it rejected.

Since Descartes every imaginable position concerning human nature and the mind/body relation has been explored. Thomas Hobbes (1588-1679), an English contemporary of Descartes, was a committed materialist claiming there was only one material substance. While his Dutch contemporary, Baruch de Spinoza (1632-77), held that mind and body were two aspects of the same substance. A little later, George Berkeley (1685-1753) championed idealism, simply denying any material substances at all. While the notion of the mind has changed in various ways with the successors of Descartes, they have all still operated within the same framework that he set out, and it is still so today. In other words, despite this 'exploration of different views and challenges to Cartesianism from almost all directions, certain aspects of the Cartesian account of the mind and the Cartesian account of how one should study the mind remained when the rivals had retreated

from the arena' (Lyons 2001, 13).

This is true of modern sciences such as experimental psychology. Here, the survival of the Cartesian legacy is partly due to the fact that even though the founding fathers of the new science sought to part ways from philosophy of mind and even explicitly rejected Cartesian dualism, their theories of the mind and human nature nonetheless remained Cartesian in principle.³⁹ The notion of the world consisting of two realms—mind and body—persisted, even though the word 'substance' was avoided in the written texts. For the emerging field of psychology, the separation of the mind and the body had vital implications for both its ethos and the practice, providing a legitimate domain to investigate, and hence making it an autonomous science. But this involves a strange doubling. On one hand the sharp distinction between the mind and body continues to be emphasised. In the *Manual of Psychology, 3rd edition*, (1924), G.F. Stout argues thus for the integrity and legitimacy of applying the term 'scientific' to psychology: 'It thus appears that even if the being which is a mind is also supposed to be a body, yet the mental aspect of its nature is so distinct from its bodily aspect that each requires separate and independent investigation... Physiology and Psychology are radically distinct sciences, each dealing with its own subject matter' (Stout 1924, 17). In the 21st century the notion of the mental as a distinct 'other' is still used in authoritative handbooks of the discipline, such as the DSM-IV-TR, without there being offered any satisfactory explanation as to what exactly the mind *is* that makes it distinct from the body.⁴⁰ And yet at the same time, Noam Chomsky has pointed out, in his influential *Language and Mind* (2006), 20th century cognitive science became occupied with a 'view that had been crystallising through the 18th century that the

³⁹ For instance, the father of experimental psychology, William Wundt concludes his *Lectures on Human Nature and Animal Psychology* (1896) with these words: 'What now is the nature of the mind? The real answer to this question is contained in all that has been said before. Our mind is nothing else than the sum of inner experiences, than our ideation [thinking], feeling, and willing collected together to a unity in consciousness, and rising in a series of developmental stages to culminate in self-conscious thought and a will that is morally free...If you answer, as is sometimes done, that it is these very operations of mind that go to make up its nature, and that therefore mind cannot be thought or conceived without them, why, then the position is granted: the real nature of the mind consists in nothing else than our mental [conscious] life itself.' This is remarkably close to Descartes' own view of the mind.

⁴⁰ As noted in the first chapter, the DSM-IV-TR briefly acknowledges that 'the term *mental disorder* unfortunately implies a distinction between "mental" disorders and "physical" disorders that is a reductionist anachronism of mind/body dualism', but makes no further attempt to unpack or consider what the mental or the mind is.

properties “termed mental” are the result of “such an organical structure as that of the brain” (Chomsky 2006, ix). Parallel with the insistence on the distinctiveness of the mind, there has hence been a growing emphasis on the brain as the foundation for the mind.

Hilary Putman likewise recognizes that it was only the early moderns for whom ‘there was a serious problem about the relation of the mind to material body’ (Putman 1981, 75). When modern physics cast the physical world as causally closed in the 1600s, this helped intensify the sense of a mind/body problem compared to what it had been earlier; and it has continued to shape the way the issue is seen and understood today. At a time when the emerging neurosciences are in some ways threatening to usurp psychology and cognitive science, there has been a renewed interest in arguing for the irreducibility of the mind, so that these disciplines might retain their status as scientific. However, the solutions proposed are essentially cast within the same terms as in the times of Descartes. While his specific notions of *res cogitans* and *res extensa* have been discarded, the Cartesian basic assumptions continue to shape questions and solutions alike. Both the ‘material’ and the ‘mental’ are still seen as having the same characteristic features; even when dualism has been rejected, the current monistic version of materialism rests on dualist premises.

This point can be made more explicit by referring to Max Velmans’ (2000, 103–104) ten-point list of (Western and modern), presuppositions which underpin dualism and contemporary materialism alike;

- 1) The soul is different from the body; when the body dies the soul continues to exist.
- 2) Consciousness is a property of the soul; matter cannot have consciousness, no matter how it is arranged.
- 3) Human beings have consciousness; nonhuman animals do not have consciousness.
- 4) Physical objects as perceived are quite distinct from our percepts of those

objects.

- 5) The contents of consciousness are observer dependent in that they exist only in the mind of the observer; the physical objects we see around us by contrast, are observer independent, in that they exist independently of the mind of the observer.
- 6) The contents of consciousness are subjective; perceived physical objects are objective.
- 7) The contents of consciousness are private; perceived physical objects are public.
- 8) The contents of consciousness do not seem to be located anywhere, or if they are, they may loosely be said to be located 'in the mind'; the physical objects we perceive, by contrast, have clear locations in the three-dimensional space surrounding our bodies.
- 9) The contents of consciousness do not seem to have spatial extension that is, they do not have dimensions such as length, breadth and width; the physical objects we perceive, by contrast, do have spatial extension.
- 10) The contents of consciousness seem to be insubstantial in that they do not have properties such as hardness, solidity and weight; perceived physical objects such as chairs and tables, by contrast, do have such properties.

Classical dualist interactionism would take claims 1 through 10 to be true; indeed, claims 1 to 3 concerning the soul are taken directly from the philosophy of Descartes. Although some non-dualists have argued for the same sharp distinction between human beings and other animals as suggested in claim 3, the common materialist position is to deny claims 1 to 3. Claims 4 to 10 are all concerned with the relation between the mental and the physical world and both dualists and contemporary materialists in fact share them.

Propositions 4 to 7 relate to the separation of the observer from that which is observed – what is also known as the 1st/3rd person divide. Most will agree with

claims 4 to 7, and these claims can be equally accommodated by dualism or reductive materialism. A Dualist will then locate consciousness in the immaterial mind, while a materialist will say that consciousness is a function of the brain. Claim 4 makes the point that conscious experiences are in the observer (in his mind or brain) and not in the world. As a result, the existence of experiences is observer dependent, but the existence of the perceived objects is not, as stated in claim 5. Further, propositions 6 and 7 are concerned with how such experiences might be known. It is here stated that in contrast to the public, objective, physical world, experiences are ‘in the mind or brain’, and are therefore private and subjective. In short, since experience lies within the 1st person domain it is frequently concluded that we cannot have scientific knowledge about it. Claims 8,9 and 10 address what conscious experiences seem to be like, or in philosophical terms, *qualia*. These presuppositions also derive from Descartes’ understanding of mind and matter. Most dualists and materialists would agree that this is how experiences *seem* to be – the disagreement is whether or not this is what experiences *really* are. For a dualist, experiences’ lack of location, extension and other substantial physical properties is consistent with them belonging to the ‘mental’, and hence being nonmaterial. For materialists, such ‘seemings’ provide the departure point for their program of research – the aim of which is to establish that mental experiences—whatever they *seem* to be—are in fact states or functions of the brain.

If we were to adopt Velmans’ ten points—except points 1-3, since we don’t want to be Cartesian Dualists anymore—then we would end up with precisely the basic assumptions that are underpinning the current debate: a commitment to monism; a Cartesian understanding of matter; and a view of reality as ‘layered’, and implying a specific understanding of causality and reduction of the ‘higher’ to the ‘lower’. The entire spectrum of views ranging from idealism through dualism to materialism does not constitute separate self-containing frameworks; rather they are variations on the same themes, features and commitments. That is, they belong to the same framework: the Cartesian framework. The next section examines its defining characteristics.

2.1 The Defining Features of the Cartesian Framework

Put very simply, the Cartesian framework's main characteristic feature is the divide between humanity—the rational, mental mind (*res cognitans*)—and nature – the causal, mechanical matter (*res extensa*). Over the following decades and centuries after Descartes these ideas came to be taken for granted and needing no further justification or inquiry. Stephen Toulmin articulates it in the following way:

At the base of Descartes' epistemology lay the distinction between the rational freedom of moral or intellectual decision in the human world of thought and action, and the causal necessity of mechanical process in the natural world of phenomena. This distinction cut so deep that, in Descartes' eyes, it justified separating the two substances of mind and matter; and his notorious "Mind-Body dichotomy" brought in its train a series of related dichotomies. An argument that began by cutting rationality off from causality thus ended by separating the world of (rational) human experience from the world of (mechanical) natural phenomena. (Toulmin 1992, 107)

This fundamental division made way for other dichotomies such as mental/material, subjective/objective, thought/objects, voluntary/mechanical. The separation of the mental from the material left the natural phenomena explainable in mechanical terms, leading to a disenchantment of the material world, because there was no longer 'need' for something transcendent in order to understand the material leading to shifts such as the turn away from the mysterious soul to the mind as a seemingly more 'scientific' concept.⁴¹ Because of the severity of the separation in the divisions it created unbridgeable chasms resulting in an either/or way of thinking, such as with the mind/body problem. Due to the polarization such dichotomizing often leads to and the lack of success in bridging the gap one of the two supposedly opposites are favoured at the expense of the other. In our case the material body came to be privileged over the conscious mind as more real. The next section considers in particular the distinction between the mechanical world and the conscious mind before it hones in on the notion of an individual and the role of rationality.

⁴¹ This will be fleshed out in the third chapter. But it is worth noting that the 'demise' into naturalism, characteristic of the seventeenth-century was not 'willingly' initiated. Rather, there was a continuous mutual *reduction ad naturalismum* among the opposing schools. The different schools considered themselves as wholly orthodox, while the rival philosophies were accused of naturalist conclusions and denial of Christian theism (Kors 2010, 646–647).

A Mechanical World and Conscious Mind

For many centuries, philosophy was dominated by the Aristotelian idea of everything having a natural place or condition. We might say that the world was considered in organic terms, indeed the earth itself could be described as a kind of organism, as in this passage from Leonardo da Vinci:

We can say that the earth has a vegetative soul, and that its flesh is the land, its bones are the structures of rocks...its blood is the pools of water... its breathing and its pulses are the ebb and flow of the sea. (as quoted by Crane 1995, 2)

Following the so-called 'scientific revolution' of the seventeenth century, a shift can be perceived from the organic view of the world dominant in the Middle Ages, to a mechanistic view of the world, as advocated by thinkers such as Galileo, Copernicus, Francis Bacon, Descartes and Newton. Matter now came to be understood mechanically, and with it, causation came to be understood in a linear fashion in terms of (efficient) cause and effect. Descartes described matter and mind in the following manner:

*Thus extension in length, breadth and depth, constitutes the nature of corporeal substance; and thought constitutes the nature of thinking substance. For all else that may be attributed to body presupposes extension, and is but a mode of this extended thing; as everything that we find in mind is but so many diverse forms of thinking. (René Descartes 1985, 210 *The Principles of Philosophy*, part one, section 53)*

As the universe came to be understood mechanically, this involved a crucial change in anthropology as well as in scientific theory. Aristotle's method of explanation in terms of teleology and 'natures' came to be exchanged with a mechanical deterministic method of investigation and explanation. Indeed, Descartes was particularly interested in challenging the Aristotelian understanding of the soul as the form of the human being. Part of the problem with this, for Descartes, was that the form was described by listing its powers and faculties; that is, it was accounted for in terms of its manifested behaviour rather than described directly; the form itself remained hidden and unknowable. For Descartes this was not a satisfactory explanation, but rather an illusion of an explanation. Furthermore, he saw theological problems with the Aristotelian view of the soul, since it paradoxically

claims that the soul is the form of the body and yet is immortal, which makes the rational soul the only form in reality that is capable of surviving 'its' body.

Descartes tried to resolve these issues in a manner that would be theologically acceptable at the time, while at the same time paving the way for his new physics and mechanistic view of the world in a way that could demonstrate its compatibility with religion. Confident of the unity of the natural sciences and the ultimate reducibility of biology to physics, Descartes treated living organisms as complex organic machines.

Descartes' view of human nature drastically redrew the boundaries of the mind, completely reconfiguring the tripartite nature of the Aristotelian soul. Descartes argued that vegetative powers do not belong to a vegetative soul, but that they can be understood in purely physical terms, as effects of movements in bodily parts of various sizes and shapes. Furthermore, the mind had traditionally been defined in terms of the powers of the intellect and the rational will. Descartes, by contrast, splits the sensitive soul in two: the 'inner' aspects of the sensitive soul—such as perception, sensation, desire and imagination—he included in his understanding of the mind. In the *Traite de l' Homme*, however, he described the same powers of the sensitive soul in terms of mechanical functions of the body. By conceiving aspects of the sensitive powers as modes of consciousness he hence—contrary to traditional thought—denied animals any such powers. Thus, by describing other aspects of these powers as purely mechanical, Descartes proposed that some of the distinctive functions of living beings have nothing to do with the soul as traditionally held, but might instead be understood in mechanical terms as functions of the body. By doing so Descartes breaches the entrenched boundary between animate ('ensouled') and inanimate objects, and considers bodies as functioning according to the same mechanical laws irrespectively of whether they are alive or not (James 2000; Matthews 1977; Hacker 2007). Similarly, he considered the capacity to reason or to think the essence of the mind, and defined it in terms of consciousness or mental attributes. Susan James summarizes:

At one level the map of the interior of the Cartesian soul resembles that of the rational Aristotelian one; it contains the same types of thoughts classified in a comparable fashion. However, the boundaries of the two are entirely different. Whereas Aristotelians picture the rational soul surrounded by the sensitive

and vegetative powers of the soul-body composite, Descartes sees it as an isolated territory connected only to the body (James 2000, 123).

Further, by rejecting the Aristotelian notion of the soul and challenging the traditional relationship between consciousness and life, Descartes did more than simply hide away one function traditionally ascribed to the soul, namely thinking, and assuming it to be separate from the rest (Matthews 1977, 68–69); he establishes an entirely new concept—‘consciousness’—which incorporates thinking *plus* the ‘inner part’ of sensation and perception. Thus framed, consciousness becomes conceivable as a function of a self-transparent agent – the mind.

By thus showing that the soul or mind is independent of the body, Descartes sought to assure the immortality of the soul (as he reconceived it), while recasting the body as a physical machine kept him in line with his view of physical reality as reducible to mechanics. For Descartes, the physical reality has a single essential characteristic, it is extended or it occupies space. This means that everything essentially physical can be geometrically described and is susceptible to mathematical explanation and description. Everything physical can be understood in mechanical terms.

Descartes was one of the first to attempt the application of a mathematically formulated science to our concept of the mind. Rosenthal suggests that the Cartesian

... idea that mind is transparent to itself seems actually to reflect a kind of mathematical model for the mind. It is natural to regard mathematical objects as immediately accessible to the intellect. Intellectual scrutiny would thus yield exhaustive and infallible knowledge of those objects. So if mind is transparent to itself, mental states would thus far be like mathematical entities. This analogy is reinforced by the idea that objects of our thought and desires are abstract propositions, since abstract objects are generally held to be subject to unmediated mental apprehension (Rosenthal 1991, 19).

However, there was something else about the human mind that Descartes recognised as essentially distinct from the body, namely the sense of self. His ‘real distinction’ argument echoes through his writings in several ways –the following

summarizes one variation. The following is taken from the *sixth meditation*:

[O]n the one hand I have a clear and distinct idea of myself, in so far as I am simply a thinking, non-extended thing [that is, a mind], and on the other hand I have a distinct idea of body, in so far as this is simply an extended, non-thinking thing. And accordingly, it is certain that I am really distinct from my body, and can exist without it (AT VII 78: CSM II 54).

Or in other words his argument is:

1. I have a clear and distinct idea of the mind as a thinking, non-extended thing.
2. I have a clear and distinct idea of body as an extended, non-thinking thing.
3. Therefore, the mind is really distinct from the body and can exist without it.

The main force of premises 1 and 2 lies in there being a 'clear and distinct idea' of the mind and body being separate. To us, these might seem blunt and unjustifiable assumptions, thereby rendering Descartes' argument unsound. However, within Descartes' system, he builds up strong arguments to prove that the premises are true and trustworthy. These arguments, though interesting, are numerous and complex and will not be further discussed here. The present point is merely to indicate that undergirding the premises of this real distinction argument is his doctrine of 'clear and distinct ideas' and their inherent veridical guarantee.

In his *Principles of Philosophy* in part I, section 45, Descartes explains what he means by a 'clear and distinct idea'. He analogises a clear intellectual perception to a clear visual perception. So, just as someone might have a sharply focused visual perception of something, an idea is clear when it is in sharp intellectual focus. Further, an idea is distinct when, in addition to being clear, all other ideas not belonging to it are totally omitted from it. As a result, Descartes is asserting in both premises that his idea of the mind and his idea of the body omit all other ideas that do not belong to them – including each other; all that remains is what can be clearly understood of each. Consequently, he clearly and distinctly understands the

mind and body as distinct and separate substances that exist independently of each other.

In the *Fourth Meditation*, Descartes spells out his argument guaranteeing the truth of whatever is clearly and distinctly understood. This veridical guarantee is grounded in the theses that God exists and that he cannot be a deceiver. Descartes believes he has proven God's inability to deceive with absolute, geometrical certainty, and would have to judge anything challenging this conclusion as false. If God were to put a clear and distinct idea in Descartes' mind that was false, then Descartes could not help but think a falsehood to be true and—to make things worse—would never be able to discover the mistake. But if God was the origin of this false clear and distinct idea, then God would be the source of the error and would be a deceiver – a notion which must be false. Therefore, all clear and distinct ideas must be true, since it is impossible for them to be false given God's non-deceiving nature.

By establishing this sharp and fundamental divide between body and soul, and by describing this as a divide between the material and the immaterial, the corruptible and incorruptible, Descartes creates an unbridgeable divide between nature and the conscious mind. While Descartes' explicit views are no longer dominant, their legacy has retained a strong influence. The Cartesian notions of the mind as consciousness, and a division between mind and body are still widely accepted, making it difficult to find a place for the mind in a physical world. One contemporary version of this Cartesian divide is for instance the idea that the mind and brain are related, but only in the sense that the mind is a 'software' program run in a piece of computer 'hardware' called the brain, or that they are related in the sense that the brain cannot survive without the life support of the body.

Antonio Damasio highlights the legacy of this divide in Western medicine.⁴²

The idea of a disembodied mind also seems to have shaped the peculiar way in which Western medicine approaches the study and treatment of diseases. The Cartesian split pervades both research and practise. As a result, the psychological consequences of diseases of the body-proper, the so-called real

⁴² Thomas Tierney has an interesting article on how Descartes' view of the body is tied in with his view of a corpse as broken machine. This leads him to a new way of understanding 'health'. It laid the foundation for the 'health-conscious subject, whose behaviour predictably aims at the political economic goal of maximum temporal accumulation.' (2012, 276)

diseases, are usually disregarded and only considered on second thought. Even more neglected are the reverse, the body-proper effects of psychological conflict. How intriguing to think that Descartes did contribute to modifying the course of medicine, did help it veer from the organismic, mind-in-body approach, which prevailed from Hippocrates to the Renaissance. (Damasio 2005, 251)

Further, the Cartesian view of matter as extended continues to shape the debate in the assumption that physical phenomena, including life itself, can be explained as a result of parts of matter moving according to set laws of nature. Indeed, in his 'Treatise on Light' Descartes proposes that matter and motion are the only concepts needed to account for natural phenomena, and goes on to articulate a theory of the physical world as exclusively made up of matter. Rather than building on the traditional four elements of matter: air, fire, water and earth, he reduces it to three: fire, air and earth. In other words, he does not use the traditional qualities 'heat', 'cold', 'moistness' and 'dryness' to describe these three elements as he sees these rather as something in need of explanation. Descartes says:

...indeed, unless I am mistaken, not only these four qualities but all others as well, including even the forms of inanimate bodies, can be explained without the need to suppose anything in their matter other than motion, size, shape, and arrangement of its parts. (René Descartes 1985, 89 The World, Chapter 5 section 26)

This view of matter maintains a strong influence in today's debates, for instance in the notion of reduction, where matter is somewhat unsatisfactorily defined as whatever our best available physics defines it to be, and where the mind is taken to be completely understandable in terms of brain events – leaving out the rest of the organism and the surrounding physical and social environment, and missing that that very environment is also shaped by the organism's preceding actions.

It is worth noting here that while there has been much discussion concerning how the mind fits into a material world or the brain, there has been little or no discussion among philosophers—at least in the Anglo-American analytic tradition—as to how we think and speak about human bodies. As a result of this lack of discussion, Descartes' understanding of the body is in principle still treated as valid today.

The Conception of the Individual – the Private Inner Self

One consequence of the Cartesian real distinction between mind and body is the notion of a private inner self. By withdrawing from the world and questioning the senses in the *First Meditation*, Descartes places the 'I' at the centre of his argument as the only certain factor. With this, as Burnyeat comments, 'subjective truth has arrived to stay, constituting one's own experience as an object for description' (quoted in Sarah Patterson 2000, 73). For Descartes, the essence of the mind is thought. However, he expands the notion of thought to include 'everything which we are aware of as happening within us, in so far as we have awareness of it. Hence *thinking* is to be identified here not merely with understanding, willing, imagining, but also with sensory awareness' (René Descartes 1985, 195 *Principles of Philosophy*, Part 1, section 9). In other words, Descartes defines the mind in terms of consciousness, and takes this to be the same as self-consciousness – implying that the mind is not only distinct from the body, but also transparent to itself.

This divide continues to set the agenda in contemporary discussions, where the individual is still taken as a distinct self/person with a private 'inner' consciousness. On the understanding that material objects are situated in a *common* field—known as 'space'—what occurs to one body in one part of space is mechanically connected with what occurs to other bodies in other parts of space. Mental events, however, happen in *isolated* fields known as 'minds', and there is no direct causal relation between what happens in one mind and what occurs in another. The only way the mind of one person can influence the mind of another is through the medium of the public physical *common* space. Or in the words of Gilbert Ryle (1991, 52): 'The mind is its own place and in his inner life each of us lives the life of a ghostly Robinson Crusoe.'

Finally, we might note how this dichotomy instantiates a new way of viewing the individual as profoundly distinct from the society within which it dwells, as it places the centre of personhood and the self in a distinct inner non-public realm. This fundamental disengagement from community meant that the human agent was no longer understood as an element irreducibly integrated in a larger

meaningful order – one’s ultimate purpose is to be discovered ‘within’ oneself. This move was common among several writers contemporary with Descartes; the seventeenth century saw the rise of new political atomism with the associated versions of ‘contract theories’ (i.e. Locke). Such contract theories were not a new phenomenon in and of themselves. Rather what was different was the way in which the individual was understood. In earlier versions the existence of community had been taken for granted as an irreducible truth of reality. That people were members of a community went without saying; it needed no further justification or explanation. What was new in the seventeenth century was the specific framing of questions such as ‘how does a community get started?’, emerging theories prioritised separate individuals over coherent communal wholes. In short, the reality of community was explained by the prior and voluntary consent of originally isolated individuals. (Taylor 1989 chapter 11) The existence of community as such was explained as a result of various forms of ‘contracts’ between separate individual parties. The numerous individual, private, minds are ultimately isolated and only in (some) accord when their respective inner thoughts are articulated in the public realm of *common* material space.

The Role of Rationality

For Descartes the essence of human nature is that we are rational thinking souls. Indeed, the famous Cartesian dictum ‘I think therefore I am’, suggests that thinking—and awareness of thinking—are the real substrates of being. This emphasis on rationality has dominated up until recently. Over the last few decades there has been an increasing awareness of the bias towards rationality that has dominated models of human nature and decision-making in academic fields such as psychology and neuroscience to mention only a few. For instance Antonio Damasio (2005) and Joseph LeDoux (1998; 2002), challenge the view of rationality as lying at the centre of human action and being, insisting instead on the actual importance and influence of emotions. Others, such as Shaun Gallagher (2005), Lawrence Shapiro (2011) and Mark Johnson and George Lakoff (1999) seek to show how the mind is part of the body, and not an independent rational ‘thing’ located in the brain.

While the Cartesian understanding of rationality as the essence of human nature is rightly being challenged (whatever the philosophical merit of individual arguments), there is another, subtler way that Descartes' use of rationality has changed the framework by which we still navigate. Descartes' understanding of rationality is not based on insight into the order of things as in ancient Greek philosophy, as in Plato, where one comes to know one's true nature when one turns towards the realm of the immaterial, eternal, and immutable. By contrast, Descartes' understanding of rationality is based on the science of physics. There is no Platonic order of ideas one could turn to – indeed understanding physical reality in terms of such a realm signals for Descartes precisely the confusion between the soul and the material world he is trying to avoid. For Descartes, coming to fully understand one's soul as immaterial involves seeing clearly an ontological chasm between the material and the immaterial, which again entails understanding the material world as mere extension. Hence, we have to see the world—crucially, including our own bodies—in purely mechanistic and functional terms, mentally 'removing' ourselves from reality as an uninvolved external observer. Whereas for Plato being rational meant being attuned to the cosmic order of things, for Descartes being rational now means the ability or power of thought we have to construct orders that meet standards demanded by knowledge, understanding, or certainty.

The true function of reason, then, in the conduct of life is to examine and consider without passion the value and perfections of body and soul that can be acquired by our conduct, so that since we are commonly obliged to deprive ourselves of some goods in order to acquire others, we shall always choose the better... It is enough to subject one's passions to reason; and once they are thus tamed they are sometimes useful precisely to the degree that they tend to excess.(Descartes letter to Elizabeth as quoted by Taylor 1989, 151)

This way of understanding rationality as detached engagement, places the individual self somehow outside of reality like an unobtrusive observer, investing the mind with the ability to categorise the world of matter. Hence, the essence of the human being—its mind—is further alienated from physical reality, and knowledge attainment and organization, together with all sources of morality, are internalized and privatized. Consciousness becomes something uniquely private;

the Cartesian mind is construed as essentially private, directly accessible only to the person him- or herself. Other people have no access to one's mind other than by observing external bodily movements and inferring analogically what thoughts might be occurring in one's mind. By relocating thought, valuation and feeling to the private mind, Descartes instantiated a stronger notion of the individual; isolated minds are now the exclusive *loci* of such realities. Further implicated in this is a new understanding of subject and object: subject and object are separate entities. Since then, modern philosophy has been haunted by difficulties concerning the relationship between these two entities.

Such questions—all based in the Cartesian understanding of human nature as having both an 'inside' and an 'outside'—are so familiar and obvious to us that we might not recognise how strikingly modern they are. Instead, we might take it as simply 'natural' and given to think of ourselves as an individual having a private internal life ('inside') and an external body ('outside'); we take for granted a 1st versus 3rd person distinction of reality. Here, the 'inside' is the mind or the subject of consciousness, while the 'outside' is the body known to the mind only indirectly through vague and utterly uncertain inferences from sense perceptions. As we will see, prior to Descartes this particular sense of inwardness and self is virtually non-existent. There is something of an anticipation of it in Augustine, who introduces a new language of inwardness and places moral resources within us. For instance, Augustine's proof of God is a proof from the first person experience of knowing and reasoning. (Matthews 1977; Taylor 1989) Hacker likens this conception of consciousness that arises from the inner/outer divide to a virus, saying:

It is with us today in mutated forms, infecting current 'consciousness studies' that bedevil the thought of philosophers, psychologists and cognitive neuroscientist. It survives in the doctrines of those who most eagerly repudiate dualism, and identify the mind with the brain. For the mind that is identified with the brain is, with some qualifications, the Cartesian mind materialised... The Cartesian mind is an aberration. It was offered as a more correct representation of human nature and the principles that guide explanations of human thought, feeling and action than the Aristotelian conceptions that it displaced. In fact, it is not. And it has foisted on us a wholly inadequate framework for the representation of human nature (Hacker 2007, 242 & 247).

When today we speak of psychosomatic or of psychophysical correlations, we are in other words attempting to bridge a 'gap' between the mental and the physical that is itself thoroughly modern. Even though both psychology and psychiatry have striven against precisely this kind of dualism, it remains a mode of thought that we easily adopt. Indeed, the kind of naturalistic, mechanistic, reductionist monism that is generated when trying to overcome this type of dualism is in fact not overcoming dualism at all, but only repressing it, since the outlook still depends on the sense of ourselves as disengaged subjects observing a world separate from our own essence.

In sum, it is clear that the Cartesian heritage is still very much present in the basic assumptions concerning reality, human nature, causation and matter. This shapes and constricts the questions and the answers conceived as possible in the debate, and explorations regarding human nature and the mind/brain/body. The lack of awareness of this intellectual baggage, the confusion and implications entwined in the concepts we use and the problems we grapple with, leads to less-than-satisfactory outcomes. But this is in fact a hopeful message. Being acquainted with the Cartesian Framework and the ways in which it underpins the contemporary debate and many of the options provided represents one step in the right direction in attempting to unpick the conceptual tangle leading to the dead-end status quo in philosophy of mind.

However, being aware of basic assumptions is not enough in itself. In order to be able to reconceptualise what we take for granted, we must realize how they might really have been otherwise. Here, what we might call an historical diagnosis of the Cartesian framework is one way to clarify how the Cartesian framework is a particular Western and Modern construal of reality and human nature, and hence in no way universal, ultimately necessary or accepted. Further, an historical diagnosis will help towards equipping us in evaluating and developing possible alternative frameworks for reality and human nature, since this equally cannot be done in a vacuum – or indeed by Cartesian isolated and detached individuals.

3. Retracing the Cartesian Framework.

The concepts circulating in contemporary philosophy of mind have been shaped by our historical and cultural heritage as well as the mere progress of the sciences. That is to say, the meaning and connotations of these concepts have changed and evolved over time, dependent on context and across languages (Jahoda 1992), and not only in response to increasingly sophisticated insight regarding natural phenomena. Hence, investigation of historical origins and conceptual genealogies is an important part of the philosophical task. As Hacker states in the opening of his book *Human Nature: A Categorical Framework*;

...many of the most general and problematic concepts, such as mind, soul, body, self, and person, were moulded by, and in some cases generated in the course of centuries of Greek, Jewish and Christian philosophic-theological reflections in the ancient and early modern world. Some of the resultant misconceptions still cling to our thought about what they signify. The employment of many psychological concepts in the human and zoological sciences is characteristically confused and riven with misconceived scientific theory, precipitously hypothesised without the conceptual clarification that should precede theory construction. So misconceptions and incoherences are masked under the rubrics of theological doctrine and its vulgarisation in the understanding of religious believers, on the one hand, and scientific as well as pseudo-scientific theories of psychology, of the mind and brain, on the other. For the puzzlements often masquerade as mysteries, which, is alleged, it is not given to man to comprehend, or as forms of empirical ignorance, which will allegedly be solved by the march of science. Whereas in fact the puzzlements and apparent mysteries are knots that we have tied in our understanding. The disentangling of such knots and the explanation of how we tied them and why they hold us captive are primary goals and full justification for the activity of philosophical clarification. (Hacker 2007, 13)

Understanding that ideas are not static, but in constant negotiation and re-negotiation can help us see that the concepts and ideas that shape our framework are not neutral or universal scientific categories, but rather a conglomerate of ideas accumulated over the centuries. This chapter attempts to make clearer the puzzlements and apparent mysteries we are caught in, by tracing some of the historical changes in the view of human nature and the conceptions of the mind that lead to the Cartesian framework. This historical diagnosis has a twofold purpose: first, to become aware of the rich heritage of ideas we are rooted into

both seeing it as a source of solutions/inspiration and also becoming aware of the mistakes and wrong turns that were made in order to hopefully avoid making the exact same ones again. Secondly, and perhaps more importantly, the historical genealogies might, it is hoped, help to show that our way of thinking is entangled in a distinctly modern Western framework. Simply pointing this out implicitly also suggests the possibility of developing a way out by drawing on non-Western or pre-Cartesian alternatives – which will indeed be done in the following parts of the thesis.

Of course, this chapter is not intended to give a complete account of the historical development of the Cartesian framework. Rather it is an attempt to highlight certain⁴³ historical turns, moments and tendencies, which when strung together and compared to each other suggest an irregular, almost ‘stuttering’, development of a particular metaphysical framework and the current impact of that particular framework. Hence, it is also worth bearing in mind that this is not purely a history of philosophy, in the sense of a mere listing of ideas as articulated by ‘professional’ thinkers, though this kind of ‘intellectual history’ has an important part to play. The scope of such an endeavour—perhaps doomed to fail before one has begun, and always partially dependent on the goodwill of the reader for its ability to persuade—is reflected in how this chapter is structured. Instead of constructing a single, all-embracing chronology from the ancient Greeks until today, the same story will be told three times, each time highlighting different shifts and changes. These three sections are organized thematically as follows: the turn to materialism; the shift from soul to self; and the turn inwards. While other changes obviously coincide with these, these three factors are particularly relevant for understanding the premises underlying the mind/body problem. The first is concerned with the shift in the view of reality in general, while the latter two touch on different related aspects in the developments in the view of human nature.

3.1 The Turn to Materialism

To echo Frederick A. Lange (1877), materialism is as old as philosophy. That is to

⁴³ An example of one significant shift that has been omitted due to the economy of the thesis is the Reformation and influence of protestant thought on how the mind, the soul and the person was conceived.

say materialism has existed as a way of conceiving reality since the ancient Greeks, with Leucippus of Miletus and Democritus of Abdera (sixth century BC) as its earliest known proponents. It was continued by Epicurus; was side-lined by a rediscovery of Plato's and Aristotle's work during the medieval period; had a revival in the fifteenth/sixteenth-century upheld by Pierre Gassendi; and went on to provide a conceptual framework for the leading scientists in the sixteenth and seventeenth centuries, Galileo, Descartes, Newton and Locke to mention a few. So while the understanding of the basic constituents of the physical world have change significantly since the early Atomist's version of Materialism, the basic premise 'that the ultimate explanation of all physical phenomena is to be found at the level of micro-structure is the lasting legacy of ancient atomism' (Taylor 2010, 160).⁴⁴

The Atomists

The premises for Democritus's metaphysics are the following; 'out of nothing arises nothing; nothing that is can be destroyed; all change is only combination and separation of atoms'. Atom means 'indivisible'. They come in different sizes and shapes and are completely solid, with no internal gaps. They are infinite in number and move around in the void. They bump and collide and become clusters and entanglements making up the perceptible objects of the world. Aside from changing places, they are indestructible and unchangeable. The objects they make up however, are not. Further, like the Cartesian notion of matter, no other qualities besides shape and size exist in the atoms themselves, all else exists by 'convention' in perception.⁴⁵ For the atomist reality itself is then no more than atoms and void. Objects perceived by our senses are only conventionally real.

Instituted by Democritus and Leucippus, atomism was carried forward by Heraclitus, Empedocles, and Anaxagoras. They tried to provide a rationally controlled account of the nature of things. However, most of what is known about the atomist view is found in Aristotle's critical and dismissive discussions of it and

⁴⁴ For more in depth readings see Lange (1877), Koons and Bealer (2010), Rosenthal (2000), Taylor (1969; 1989), Papineau (2001), and Kenny (2005a; 2006b; 2007).

⁴⁵ One direct quotation surviving from Democritus claims that 'by convention sweet and by convention bitter, by convention hot, by convention cold, by convention colour; but in reality atoms and void' (DK 68B9, trans. Taylor 2010, 143)

Aristotle's commentators' elaboration on these discussions. Aristotle regarded his framework as a rebuttal of the Atomist view, as he found it inadequate in explaining regularities to be observed in middle-sized objects. He didn't find Plato's metaphysics any better. His own solution is to insist there is more to the physical world than atoms, viz., the immanent forms, but there isn't another realm entirely, as Plato would have us believe. Aristotle's critique was however not the end of the story. Epicurus, albeit with some modifications, carried forward the central atomist doctrines, as part of the fundamentals of the Epicurean philosophy and way of life:

...the basic units of the world are everlasting, unchanging, indivisible units and atoms. These, infinite in number, move about in the void, which is empty and infinite space; if there were no void, movement would be impossible. This motion had no beginning, and initially all atoms move downwards at constant and equal speed. From time to time, however, they swerve and collide, and it is from the collision of atoms that everything in heaven and earth has come into being. The swerve of the atoms allows scope for human freedom, even though their motions are blind and purposeless. Atoms have no properties other than shape, weight, and size. The properties of perceptible bodies are not illusions, but are supervenient on the basic properties of atoms. There are an infinite number of worlds, some like and some unlike our own. (Letter to Herodotus, D.L. 10. 38-45, as quoted by Kenny 2006b, 95)

Together with Stoicism, Epicurean philosophy was an important part of intellectual discourse and culture through the Hellenistic and the Roman periods. In the second century Lucretius wrote a long philosophical poem, *De Rerum Natura (On the Nature of Things)*, where he sets out the tenets of Epicurean atomism: bodies are made out of atoms in the same way words are made out of letters. When the Stoic emperor Marcus Aurelius Antoninus (121 to 180 AD) founded chairs of philosophy at Athens for all the major schools of thought, Christianity was—perhaps surprisingly in the hindsight of the modern reader—not represented. While Christian philosophy was still in the process of finding its feet, Stoicism and Epicureanism were on retreat in the face of the rediscovery of Plato's and Aristotle's philosophy. The revival of Plato was carried most notably by Plutarch (46-120 BC), Plotinus (205-70 AD) and later on by Augustine (354-430 AD), and together with the budding Islamic and Latin traditions of scholarly commentary on the Aristotelian texts; this largely eclipsed the work of the atomists. Already at the end of the second century, Christian philosophers made the first attempts to bring

together the philosophy of Plato and Aristotle with the teachings of the Gospels and St. Paul, an attempt that has never been given up. In the thirteenth century Aristotle's natural philosophy continued to dominate intellectual discourse, most famously through the work of Thomas Aquinas. The atomist view was completely side-lined (Taylor 2010, 157–235; Kenny 2006b; Kenny 2007).

The rise of modern science

However, it was not side-lined for good. The rediscovery of the Epicurean epic *De Rerum Natura (On the Nature of Things)* by Lucretius in the fifteenth century led to a renaissance of Epicureanism and the atomist conception of reality – albeit with various modifications. Its new main proponents—many of which did not belong to the mainstream philosophical circles of the day—included Galileo Galilei, Rene Descartes and, Pierre Gassendi. In a time with growing dissatisfaction with the ‘non-explanatory’ terms of formal and final causes in the Aristotelian framework, they saw the promise of ‘genuine explanations of phenomena in terms of the basic physical properties of matter, conceived atomistically’ (C. C. W. Taylor 2010, 160).

At the end of the sixteenth century and the beginning of the seventeenth century ‘Natural Philosophy’ broke free from its Aristotelian ties. The atomist theory provided the conceptual furnishing needed for a new understanding of the physical world. So-called ‘Natural Philosophy’ now separated into two distinct ventures: the philosophy of science and the science of physics. While they shared the subject matter, their approaches and aims differed. The philosophy of sciences sought to examine the conceptual framework surrounding the concepts used to describe and explain natural phenomena, while scientific physics sought to establish and explain the phenomena themselves, by way of empirical investigation.

In this development, what is now most often seen as the establishment of scientific method, mathematics played a crucial role. The Copernican Revolution, where In his epochal book *De revolutionibus orbium coelestium*, published just before his death in 1543, Copernicus presented a fully predictive mathematical model of the planets’ orbit around the sun. Kepler later elaborated this model, his most

important contribution being that the planets' orbits are elliptical and not circular. With his telescopic observations of the planet Venus, Galileo Galilei (1564-1642) confirmed this theory. Further, Galileo began to criticise the dominant Aristotelian physics of the time, in particular in regards to the notion of gravity. Contrary to the Aristotelian notion that 'nothing moves unless it is acted upon by an external force', Galileo held that 'a body in motion will continue to move unless acted on by a contrary force, such as friction' (Kenny 2006a, 23). Further, Newton's physics (and later on, those of Einstein) showed that the most powerful parts of the universe—astronomical systems—are governed in part by gravitational laws that are *per se* structure-neutral. Hence, the motions of celestial bodies are indifferent to the ordered good of creation. This is a major shift from Aristotle and Aquinas, as their structured universe is simply beneficent. No longer was there any *telos* or ultimate good towards which all was moving. Instead, there were cogs turning in a machine describable by mathematical equations. Now, the only valid way of describing life and reality was one of efficient causes and effects. Mathematics and quantitative measures became increasingly applied to measure physical phenomena as they were seen to provide the most certain knowledge available.

In the wake of modern science arose a particularly important dichotomy that has already been touched upon in the above: that of objectivity and subjectivity. While we know from ordinary experience that roses are red and grass is green the physics of colour is different from our experience of it. For instance, a blind person can know the physics of colour without ever having had the experiences of seeing colour. On this understanding, the experience of properties such as for instance 'redness' is located in the mind of the observer rather than in 'external' material reality. This approach began to make its mark on philosophical discourse in the start of the seventeenth century, and is now known as the distinction of primary and secondary qualities. While there had been hints towards this by earlier thinkers, it was first clearly articulated by Galileo Galilei. He explained that primary qualities⁴⁶ are inherent in bodies, while secondary qualities⁴⁷ are not in the external world, but in the minds of observers. Put another way, for Galileo,

⁴⁶ Weight, texture, and so on.

⁴⁷ Taste, perceived colour, and so on.

primary qualities are objective while secondary qualities are subjective. The way to progress in physical science, he argued, was to attend to the primary qualities, since secondary qualities are to be understood as the effects of the primary qualities on the sensory mechanisms of sentient beings. In the absence of such effects, secondary qualities would not even exist. So while the focus of Aristotelian physics was to systematically classify different kinds of objects, by identifying their substantial forms, the Galileian view would metaphysically be founded not on macroscopic objects and their forms, but on the miniscule atoms out of which larger objects are composed – which, again, could be expressed mathematically.

Descartes – Matter as Equations

Descartes, being a mathematician himself, believed that mathematics was the key to physics, or that ‘all natural phenomena can be explained by the motion of geometrical matter’ (Kenny 2006a, 169). With this Descartes rejected the teleological mode of thinking and cosmic order, replacing it with a mechanical description of physical reality. Here is the driving force behind the *Meditations*. Descartes’ project is to lay the foundations for his new physics in a way that demonstrates its compatibility with a certain outline of theology articulated by the Lateran Council. His dualism does not, then, stem from the possibility of the mind existing without a body, but—beginning from the ‘opposite direction, so to speak—from the notion that ‘thought and extension’ are attributes of distinct substances. The Aristotelian universe of a diversity of substantial forms all joined inextricably to matter was replaced by the Cartesian universe of two distinct substances: thought and extended matter. Thus Descartes challenges his contemporary epistemology. There is no ‘intentional form’ passing from the object to the sense organ; the senses do not receive ‘likeness’ from corporal things at all. For Descartes, sensations are located firmly in the mind and do not exist in bodies at all. Furthermore, the human intellect is not dependent on the senses as the sources of its ideas, but is supplied directly by God with innate ideas of thought and extension. For Descartes it is important that the mind is the *locus* for all human thought. Sarah Patterson sums up Descartes’ intentions in the following manner:

Descartes intends to show that by drawing the mind away from the senses, by turning the intellect away from phantasms and towards innate ideas, the mediator can attain a clear and distinct perception of the primary notions of

metaphysics for the first time (Crane and Patterson 2000, 81).

But this only goes for humans. Non-human animals are merely bodies, with no capacity for cognitive experience. The body is, on Descartes' view (which also distinguishes him from his Renaissance predecessors), a purely mechanical entity. It is, in other words, not enlivened by a sensitive organic soul. It is, Michael puts it,

... a new line, denying the traditionally recognised commonality between human and animal sense experience and imagination, and, with this, rejecting corporeal sense cognition, said by Renaissance pluralists to be a 'medium' between mind and body, as is well known, was very influential. But with this new line...bodies do not think (Michael 2000, 172).

Descartes is here re-arranging Aristotle's categories, as Susan James (2000) and Sarah Patterson (2000) both affirm. Descartes sought to separate what belongs to the mind and what belongs to the body, and does so by reorganising the powers of the tripartite nature of the Aristotelian soul, for instance by categorising vegetative powers not as aspects of the soul but as functions of the body. Further, he also places powers normally attributed to the sensitive soul in the body, which he views as entirely mechanical. The vital functions, including nutrition, are purely mechanical processes belonging to the body alone. Sensing as understood in Aristotelian terms as an operation of the soul performed by means of corporeal sense organs, succumbs to sceptical doubt about all corporeal things. For Descartes, sensing and imagining is an intellectual act, performed by 'thinking things'. Apart from humans, all other living things are hence viewed as complex organic machines. Here, Descartes blurs the distinction between the animate and the inanimate and redefines the entire Aristotelian notion of life.

What Descartes is attempting is to provide an explanation of the human soul without substantial forms and yet at the same time argue for the soul's immortality, as well as building on the principles of his physics that knowledge is not based on sensory conception of matter, but on a clear and innate idea of matter as geometrical extension. Cut loose from its Aristotelian grounding, the only capacity left for the soul is that of thinking or reasoning. Descartes holds that the mind's presence to itself suffices not only for the mind's knowledge of its own existence, but also for its knowledge of its own nature. The mind can discover its

own essence, faculties and capacities simply by contemplating on its perception of itself. Hence, knowing the mind is easy and intuitive, and does not require a labouring process. Nor does it require the postulation of any sensible material thing, since the soul is utterly dependent on God and independent of the body. Thus for Descartes, matter, as an extended substance, is not dependent for its existence or its properties on soul-like substantial forms; physical phenomena (including life) can be explained as a result of parts of matter moving according to the laws of motion established once and for all by God (Crane & Patterson 2000, 75–93; James 2000, 121–127).

Now, Descartes was not the first to describe the mind as essentially thought and the body as essentially extension. These ideas, as Robert Pasnau (2007, 283) argues, have roots in both Augustine (see for instance *De Trinitate* X.x. 16) and Aquinas (see for instance *ST 1a 18.2c*). However, when Descartes redefines the soul—no longer making it a requirement for life—he inadvertently exposed its ultimate scientific irrelevance, a consequence that did not become apparent to most philosophers until the end of the eighteenth century. The metaphysical view that the essence of the body is extension propagated by Descartes and others such as Hobbes (whom he otherwise had little in common with), marked the end of Renaissance science and the beginning of a new era of a mechanical view of nature. So-called ‘life’ now came to be conceived as merely an apparent property of complex mechanisms.

The Nature of Matter as Inert

So while the new science provided a powerful push towards materialism, the decree from the Lateran Council (1513) to prove the existence of the immaterial soul resulted in a difficult tension for contemporary philosophers. The concern was that the mind or the soul might be short-changed or dismissed all together. As John Yolton highlights there were two ways that this might happen:

If matter is inert and passive, and if that kind of matter is seen to be dominant, there seems to be no room for mind or spirit. The result is mechanism, automatism, and necessity. On the other hand, if matter is thought to have active principles inherent in it, or if it is receptive to such principles imposed upon it, once again there is no need for the spiritual or

mental causality in the working of nature. A more extreme version of this second alternative is that thought is retained in the account of the world, but it becomes a property of matter, either inherent or imposed (Yolton 1983, 3).

The question of how the two substances could interact became a problem that needed to be considered. The various attempts to resolve this tension through the seventeenth and eighteenth century vary from one extreme to the other. So the rise of materialism went via dualism, idealism and solipsism and was rather a clash of conflicting views and their inherent or shared problems than a unidirectional evolution of ever-improving ideas. However, in common for all of these are two main changes in perception. Firstly, the physical world has lost its 'spirituality' and become a machine; it is no longer driven by purpose, but instead by the motion of inanimate objects that mindlessly pass on momentum. Secondly, the subjective world has lost its physicality. In the new paradigm it seemed unlikely that the (objective) world is as we (subjectively) experience it. The world was divided into first and second order properties.

Hence, despite all of these complex perspectives on the issues of subject *versus* object, or mind *versus* matter, and so on, the entire debate ultimately hinged on how matter was to be defined – what exactly were its defining properties. One influential maxim of the seventeenth and eighteenth century was that 'no thing can be or act where it is not'. This belief was applied to perception and knowledge as well as to physical action, for instance in the notion that there can be no mental action at a distance. Minds must therefore be located where objects are perceived and known. The issue that then arises is whether minds and bodies are located in the same way. While some argued for this kind of extension of the mind, others reacted against it, arguing—as Yolton (1983, 83-84) observes—that extension of the mind was fundamentally different from extension of the body. The common notion was that extension of the body was a function of hard, impenetrable parts, while the mind was understood to be indivisible and not having any parts. For many it seemed, then, that 'extension' might have two distinct meanings: one for hard, impenetrable parts, another for a whole which had no parts and to which primary qualities do not apply. Indeed, some, such as John Locke (1632-1704), suggested using another term for the extension of space altogether, namely

'expansion'. On this view, space was said to have parts, yet these parts were not particles. One of the reasons for thus distinguishing space from body was to show that space itself is not material, and so the parts of space were defined in terms of points and lines, rather than in terms of hard, impenetrable particles. The versions of these views were too many to count here, but in general one might say that there were four different items to which extension was ascribed: material bodies with divisible parts; immaterial, finite minds which have no parts; space which has nonmaterial, perhaps geometrical parts; and the immaterial, infinite mind or spirit—God—who has no parts but who is present to all things.

Finally, the period saw a shift from a corpuscular concept of matter, which viewed matter to be dead and inert, utterly incapable of thought, on any level of complexity of organisation—to a view of matter as being more 'active'. Here issues were for instance whether gravitation, repulsion and attraction were powers inherent in matter itself or forces imposed from without. If the latter was true, then it would have to be some kind of immaterial substance—for instance God—doing the imposing; if on the contrary the powers were inherent to matter, then the notion of thinking matter could not be dismissed.

In eighteenth century Britain there were, in other words, an abundance of views on the nature of matter, but in general three versions of materialism can be said to have emerged:⁴⁸

Locke's suggestion of thinking matter, Collin's insistence that organized masses of matter can have properties that none of the individual parts has, and the change in the scientific concept of matter, from passive corpuscles to active forces. Reactions to the first two of these strands frequently involved the fear that man would be viewed as a machine, as a piece of clockwork.
(Yolton 1983, 30)

Locke's contribution to the debate—which is what the following will select for consideration—is to suggest that it would be possible for God to add the power of thought to a material system. Not only does Locke consider this a mere logical possibility, but also a real one, given the limits to our understanding of both matter

⁴⁸ This chapter will consider the version put forth by Locke.

and mind. This suggestion—alongside Locke’s comment that immateriality was not necessary for immortality—became a major part of the discussion during the late eighteenth century. Partly, the point of contention lay in the premise that if any part of matter thinks, then every part of matter must do so. In short, the many different reactions to Locke’s suggestion reveal a struggle to conceive how in ‘a suitably organized system of matter, thought might indeed be a property’ (Yolton 1983, 27). How could one make this move without turning man into a machine? Locke describes the body of animals and birds as machines, and distinguishes between the mass of matter and living plants and animals as merely a difference in the organization of particles; the particular organization constitutes the life of the animal or plant. Sense, memory, and reason are products of—even predicates of—matter and motion. For some, it might have been a short step from these ideas in Locke to establishing human consciousness and reason in organized matter in motion (Yolton 1983, Chapter 1).

Locke’s view on personal identity also shaped the general growing commitment to materialism. Locke held that identity of a living being must be relative rather than absolute, since the criterion for identity of a mass of matter—where no particles can be added or taken away—cannot be the criterion for a living being. For, as in the example he uses,

an Oak, growing from a plant to a great tree, and then lopp’d, is still the same Oak; and a colt grown up to be a horse, sometimes fat, sometimes lean, is all the while the same horse, in both cases, there may be a manifest change of the parts, but they would still be the same horse and oak. So identity cannot be a continuation of the same matter, rather he sees identity to be the continuous life in accordance with the characteristic metabolism of the organism. So for Locke identity of the same human being, as human beings are animal, consists in “nothing but a participation of the same continued Life by constantly fleeting particles of matter, in succession vitally united to the same organized body” (Quoted by Kenny 2006a, 224).

The important aspect of this definition in this context is that it is an account of the identity of the human being that is not based on the notion of a human soul, but on the arrangement of matter. So while Locke was by no means a materialist *per se* (and in a similar way as Descartes did when he defined the body as a machine) he

nonetheless accounts for the identity of living beings as ‘constantly fleeting particles of matter’ rather than appealing to a soul. It is ‘sameness of consciousness’ that secures our identity, and that very consciousness is intimately linked to the organisation of matter (the body).

Thomas Hobbes (1588-1679) also played a vital role in the rise of materialism, in particular because of how his views emerge from his brand of empiricism. In the *Elements of Law* (I.11.4 and I.11.5) he argues that to the extent that we do conceive of that which is spiritual such as the mind, the angels, or God, we must be conceiving something that is extended, for the reason that all conception is grounded in sense or perception and hence it is only that which is extended which we can perceive at all. Hence, he concludes the argument in *Elements of Law* by asserting that angels and spirits are corporeal substances. Later, in the *Leviathan*, as quoted by Pasnau, he states the same point in the following manner:

Every part of universe is body, and that which is not body is no part of the universe. And because the universe is all, that which is no part of it is nothing (and consequently nowhere). Nor does it follow from hence that spirits are nothing. For they have dimensions, and are, therefore, really bodies.(Hobbes, *Leviathan*, as quoted by Pasnau 2007, 286)

Finally, David Hume (1711-1776) believed one ought to entirely abandon the dispute over the materiality and immateriality of the soul because the dispute itself assumed an idea of ‘substance’, which in fact we do not have. On Hume’s view, all the available accounts of external objects and of matter contained difficulties and contradictions. He was particularly weary of the distinction of primary and secondary qualities which is taken for granted by many modern philosophers, because by making colours, sounds, tastes and so on mere impressions in the mind consequently entails that one can never provide a coherent account of external objects. Hume tried to find a way around these problems by rejecting some of the common concepts. Unfortunately, rather than abandoning the dispute he was drawn back into it despite himself through his discussion of the location and extension (or lack thereof) of thought: he argued that not all qualities of objects are spatially located, nor all the perceptions present to us extended (Yolton 1983, 60).

In summary, the beginnings of a paradigm shift are detectable with the new theoretical frameworks of Kepler and Galileo, ending with Newton's insights in physics, by which natural philosophy was established as dealing with the 'external' world. The self, however, remained an oddity throughout the seventeenth century, in an otherwise increasingly mathematical view of the world, and was only brought back into clear focus with Locke's *Essay* in the late seventeenth century. Some philosophers of the eighteenth century set out to extend Newton's natural account of the external world to the internal realm, and notions of the self as an immaterial substance were marginalised. Instead, theories about minds as 'dynamic natural systems subject to general laws of growth and development' (Martin and Barresi 2006, 141) were favoured. This time period encompasses the most radical shift in the Western conception of matter and the soul.

The Cementation of Materialism

The failure of dualism to account for the interaction between the mental and physical leads to monism. Idealism is dead and the only option left is materialism or physicalism. In the contemporary setting this is often formulated in the following manner; 'the only reality that exists is material or physical reality, and consequently if mental states have a real existence, they must be reducible to - they must be "nothing but" - physical states of some kind' (Searle 2004, 34). The notion of the 'material' in Searle's (and many others') understanding of Materialism is inspired by Descartes's influential characterization of material bodies, in Meditation II. Given this construal, materialism is just the view that everything that exists is extended in space and that nothing non-spatial exists. The mental, non-material reality in dualism is just crossed out or reduced to the physical.

The crucial premise of materialism or physicalism that becomes widely accepted in the mid-nineteenth century is the completeness of physics. The argument, as Papineau articulates it, is simply that 'if all physical effects are due to physical causes, then anything that has a physical effect must itself be physical.' (2001)⁴⁹

⁴⁹ Here the echo of the early Atomists is heard.

The persuasiveness of modern empirical science is what Papineau attributes to the wide acceptance of this basic view that was fundamentally different from the stance that had been common ground up until then. The argument that takes us from the completeness of physics, to the conclusion that everything is physical, as Papineau outlines:

...if the completeness of physics is right, and all physical effects are due to physical causes, then anything that has a physical effect must itself be physical. Or, to put it the other way round, if the completeness of physics is right, then there is no room left for anything non-physical to make a difference to physical effects, so anything that does make such a difference must itself be physical. (Papineau 2001, 8)

This is reflected in the rise of Behaviourism, where the mind and the non-material are scientifically irrelevant, as it cannot be objectively tested. The only observable evidence for the existence of features of the mind, but not the mind itself, is behaviour. Having a mental state is just being disposed to a certain sort of behaviour. The following doctrine—often called ‘Physicalism’ or ‘Identity Theory’—considered mental states to be identical with brain states. The mind is the brain, just as H₂O is identical to water. Whereas in functionalism mental states are not defined by any Cartesian mental essence or their physical structure but by their function, function meaning causal relations to external stimuli, to other mental states and to external behaviour. The last way of describing mental states that Searle mentions is computational states of the brain. The mind is to the brain what software is to hardware. This view he calls ‘Strong Artificial Intelligence’. Another way of describing mental states that has emerged in the last decades is as ‘pixie dust’, it is nothing more than mere fiction or fairy tales that we currently hold from a lack of better scientific explanations. This view is what we have called Eliminativist materialism(Searle 2004, 35–46). This leaves quantifiable matter, as defined by our best physics, to be the single valid description of reality.

Matter - Summary

Materialism as a view of reality has progressively changed in Western history in light of specific thinkers and events. It has been changed by advances in science and has in turn shaped the view on human nature. At the same time it is precisely the human experience and consciousness that has pushed back and left the

materialist account wanting. In particular, this historical tracing of the concept of matter shows that ever since Descartes—even after the failure of dualism—the notion of matter (and implicitly the view of reality) has largely remained unchanged. In this sense, contemporary understandings of Materialism amount simply to (impoverished) versions of Cartesian dualism, sharing a now taken-for-granted rejection of Aristotelian understandings of matter and causation. Obviously, the empirical advances of the new physics are not to be ignored. The point here is that by throwing out the Aristotelian conceptual framework—which was and indeed still might have much merit in making sense of new data—one is left with an impoverished physics and understanding of reality as a whole.

The new approach to science brought in a new understanding of the physical world, and was the main reason for constructing new narratives of the soul, the self, and the mind. Its mechanistic approach to nature led—over the course of a century—to a radically new way of understanding and conceptualizing nature and human beings. At the core of Aristotelian physics lay the ideas of substantial form—which combined with matter had made each thing the thing it was—and teleology, or the explanation of phenomena by the purpose they serve rather than by postulated causes. In the new forms of materialism following in the wake of Descartes' break with Aristotelian philosophy, however, there was room for neither substantial forms nor teleology. Everything was now understood in terms of (efficient) causes and effects, and all talk of purpose and ends was removed from the scope of 'science'. Thus, the criteria which theories and practices had to fulfil in order to be considered truly 'scientific' were altered – no longer was there any room for metaphysics, epistemology or theology. The shift from Aristotelian physics to a mechanistic view of physics entailed a radical shift in the view one might take on intentionality in nature in general, and the role of human consciousness in particular. The following two sections will consider this in more detail, describing the parallel shifts from 'soul' to 'self' and the gradual relocation of the 'self' to a 'private' and 'inner' realm.

3.2 From Soul to Self

Alongside the turn inwards is the development of the concept of the soul, which in

turn fragments into the notion of the self, consciousness and the mind. While contemporary connotations in regards to the soul often are purely religious, mystical and immaterial, it starts out denoting nothing more than a living substance. This section, like the previous, starts with the notion of soul found in Ancient Greece, and follows the changes and developments the concept undergoes in Socrates, Plato and Aristotle. It then highlights the view of the soul that emerges with Augustine and Aquinas in the attempt to marry Greek thought with Christian doctrine. It continues to consider the tension that arises in the wake of that mingling through the Renaissance and into the seventeenth and eighteenth century, where the influence of natural science changes the debate from one of the immateriality and immortality of the soul to a concern for the self and the mind as understood in a materialistic view of nature.⁵⁰

The Soul as Life – Ancient Greek Theories of the Soul

It is hard to establish a clear picture of what the pre-Socratic thinkers understood the soul to be, as the notion of the soul (*psūchê*) does not first appear in a philosophical or theoretical framework (MacDonald 2003, 34). The first mentioning we find is in the Homeric Poems, where the word ‘soul’ is used in two different but related ways. On the one hand, the soul refers to that which a human being risks losing when facing death (indeed, in the Homeric oeuvre mentioning the soul is a suggestion of death). On the other hand, the term ‘soul’ is used to describe that which leaves the body at the last exhaling breath and travels to the underworld, where it continues to exist as a mere shadow of the deceased person. In other words, once the soul is departed the body, that person is dead. The soul is what represents life, that otherwise hard-to-grasp ‘thing’ or property which distinguishes between a living being and a corpse. Yet, the Homeric usage of the ‘soul’ is not identified with what it is to be a ‘person’, nor is it given any capacities, virtues or activities – as seen in later notions of the soul. However, and importantly, it is only human beings that are said to have (and to lose) ‘souls’ and the Homeric literature never depicts non-human creatures in the underworld. Thus it is viable to say that the soul, even though not connected to the notion of a

⁵⁰ For more in-depth reading see MacDonald (2003), Lagerlund (2007), Crabbe (1999), Martin and Baressi (2000; 2006), Ryle (2000).

person, still was something particular to human life.⁵¹

In the 6th and the 5th centuries BCE, noteworthy changes happened in how the Greeks conceived and talked about the soul. First, the Homeric connection between the soul and risk of death gradually becomes less prevalent. Instead having a soul is associated with simply being alive – indeed, during the 5th century the word ‘ensouled’ (*empsūchos*) emerges as the common word for being alive. In other words, the term was no longer reserved for human beings as in Homer, but came to be used generally to distinguish that which is alive from that which is not. For example Pythagoras thought that plants have souls (Bremmer 1983, 125). Secondly, by the end of the 5th century it became increasingly common to attribute to the soul a growing number of ways of acting or being acted upon, such as emotions or virtues. It became the bearer and origin of moral qualities, thus accounting for a person’s moral behaviour. Once this connection was made it was not long until the soul was viewed as something that might engage in activities such as emotions, thinking and planning. Furthermore, the soul became the bearer of virtues such as courage and justice. Because of these developments the very ‘language made available something that Homeric Greek lacked, [namely] a distinction between body and soul’ (Lorenz 2009a).

Now, the soul was indeed viewed as a ‘physical’ feature—although without having a single location in the body—that is, the life-force in all animated beings, as well as the bearer of an array of activities and responses. It is in the wake of these changes, that the more familiar Platonic and Aristotelian theories of the soul were able to emerge. But crucially, the prevalent idea was that the soul is bodily; it was not seen as abstract or as an internal private space, nor was it (yet) considered to be immortal. Hence, there simply were no problems about the relation between

⁵¹ ‘Homer’s concept of human Nature differentiates between the two groupings of central physical terms. One group consists of *psūché*, *thymos*, *menos* and *nous*, each of which is a soul-related (physical) function necessarily dependent on an animal body (its host). Their location or internal site is indefinite and underdetermined, and as a component of the whole being (an ensouled animal) they are part of a complex collection of properties. The other group contains *kêr* (or *kardiê*), *phrenes*, sometimes *hepar*, and later *kephale*, each of which is an organic internal part of the animal body, occupies a definite, determinate internal site, and upon which the first set of psychical functions has a necessarily dependent relation, but whose properties are unclear and over-determined’ (MacDonald 2003, 22).

the soul and the body; the difference between these was viewed as difference in degree, not in kind. In a sense, our modern (post) Cartesian concept of mind has its *closest ancestor* in Archaic Greek, in the Homeric *nous* (mind or intellect). But where Descartes and his descendants would later equate the mind with the faculty of reason, Homer had characterised *nous* as one dimension of the human being. The closest relative in Archaic Greek to the medieval and pre-Cartesian concept of the soul or *anima* is *psūchê*, but only in so far as the Homeric *psūchê* characterises a uniquely human life-force or vitality which does *not* survive bodily death.

The Soul from the Realm of Ideas – Plato

This fifth-century semantic expansion of the notion of ‘soul’—together, of course, with his well-known explicit reaction against sophistic relativism—lay behind Plato’s distinct development of the concept of ‘soul’. Plato’s conception of the soul changes throughout his writings. Still, despite the incompatibility between his various accounts—always presented in an ethical context, and not primarily concerned with the metaphysical nature, composition or functions of the soul—a certain development is perceivable. In short, Plato’s understanding of the soul is best considered in light of his search for stability and immutability; something he found in the Idea or Form of things. The realm of Ideas is the source of objective knowledge, and they are the universals that enable us to understand the world (Trigg 1999, 2nd, 7). For Plato, the body—as anyone might observe—belonged to the material world, and was subject to constant change. By contrast, the soul was unified and immaterial, and originated from the realm of Ideas, and was therefore unchangeable and immortal, preceding and exceeding life on earth.⁵²

Plato’s early writings reflected a Socratic picture that could very well be described as ‘an ambiguous substance monism, that is *psūchê* or soul is the life-force, the principle is self-motivation, the bodily endowment of an animal being, manifest in is breath, blood and desire’ (MacDonald 2003, 53). In the later dialogue *Phaedo*, however, Plato describes the soul in terms of cognitive and intellectual features: it is something with the capacity to reason, more or less depending on the

⁵² Again, because Plato identified the soul with the person, this notion of the ‘afterlife’ is different from the one found in the Homeric tradition.

disturbances and distractions of the body and its desires. By reasoning it has the ability to make judgments about what to do and how best to behave. Still, this is on the one hand somewhat narrower than our modern notion of 'mind'; for Plato, the soul is only responsible for a subset of a person's mental or psychological activities and responses – a large number of what we would now think of as mental states, such as beliefs and pleasures, Plato in fact attributed to the body. At the same time, the soul is not narrowly intellectual or only concerned with the realm of ideas; it too can have desires and is directly involved in regulating and controlling the body and its affections (Lorenz 2009). Another area where Plato's account of the soul moves away from the Homeric account is when he sees the *psūché* in human beings to be superior to that of animals because it has the capacities for moralisation and rationality.

Plato's later dialogues suggest understanding of so-called 'mystical' doctrines, with possible roots in Orphism, Pythagorean, or some other shamanistic sets of beliefs. It has become vital for Plato to show that the soul is a distinct and separable substance, which is nonetheless intimately linked with the animal body and dependent for some of its functions on the whole being; what might be described as an 'ensouled body'. The higher function of the soul—such as the rational insight into the Forms or return to the divine source—imply that the soul can nevertheless exist independently of the body and that it is therefore immortal. Plato's works might be read in terms of his struggling with the difficulties stemming from such an attempted synthesis between the previous Socratic picture and the new mystical vision (MacDonald 2003, 53).

In both the *Phaedrus* and the *Republic*, Plato describes the soul as having three powers: reason, 'spirit' and desire (appetite), of which reason is the 'highest' part, since through it the soul has access to the realm of Ideas (Stevenson and Haberman 1998, 3rd, 96–100). He argues for this distinction by showing that it is possible to desire something and be averse to it at the same time, and that this conflict shows that there are distinct (and possibly opposed) subjects in the human soul. Reason is the only one cognitively dependent on sensory reports supplied by the bodily organs and vitally dependent on the powers for the continuance of its

host *qua* whole individual. But reason is not dependent on its own nature; that is, for the exercise of the power itself on any bodily organic entity (MacDonald 2003, 53). Another change in Plato's account of the soul is that the *Republic* offers a theory of the soul which, among other things, allows attribution of (in principle) all mental or psychological functions to a single subject, namely the soul. The theory thus respects the unity of the mind, in a way that the *Phaedo* does not.

In summary, we find in Plato a development of the Homeric notion of soul. First, the (human) soul has been attributed particular qualities, which makes it more than just a generic term for 'life-force'. Secondly, the soul has been related to the realm of unchangeable ideas making it immortal, and so is capable of existence without the body. And thirdly, in the process of arguing for such immortality, Plato also unified the soul, identifying it with the 'person'.

The Soul as Form: Aristotle

Aristotle's (especially later) work is systematic in a way Plato's never was and his style of writing breaks with the polished prose found in his predecessors. Furthermore, his philosophy was greatly shaped by his numerous anatomical and zoological studies, which he constantly related to his metaphysical speculation. However, the main shift introduced by Aristotle lies in his famous understanding of 'form' and by implication his understanding of the soul, of matter and indeed of reality in general.

In *De Anima* Aristotle lays out his theory of the soul – a much more comprehensive and explicit notion of the soul than the one we can extract from Plato's writings. According to Aristotle, the soul is a specific sort of nature – a principle that accounts for change and rest in the specific case of living bodies, be it plants, animals or humans. No longer is the soul related to a realm of eternal Ideas, but the relation between the soul and the body is an instance of the more general Aristotelian relation between form and matter. For Aristotle, 'natural objects and their behaviour cannot be fully understood in terms of their material constituents and their properties, but have to be explained in terms of their essence and nature' (MacDonald 2003, 54). This means that natural objects are irreducible to their

particular configuration of basic material constituents; the form is akin to a thing's essence.

The difference between Aristotelian forms and Platonic forms is that for Aristotle each form is a form of some actual individual. The two are in other words not separate as they are in Plato. The Aristotelian soul, differs further from the Platonic (and later Cartesian) in that it is not a subsistent, interior immaterial agent acting on the body. Instead, it is the form of a human being. This means that its 'essence is defined by its relationship to an organic structure' (Kenny 2006b, 242). The soul is identified as 'the actuality of a body that has life'; it is a defining 'part of what it means to be 'alive' and is thus common to plants, animals and human beings – although the specific capacities of their souls vary. The soul is the origin of change and motion in the living body, providing the latter's final cause and teleological orientation. Aristotle's specific view on the immortality of certain elements of the rational (human) soul is hard to decipher—it involves a complex discussion of passive and active intellects, and so on— but it is nonetheless clear (and for the present purposes this is the essential point) that he sees the soul as the form of an organic living body.

The Soul as Inner Space: Augustine

In the period between Aristotle and Augustine, no ancient author attempted a comparably rich notion of human nature. However, while Aristotle's teaching and systemisations were never completely forgotten, they were partly obscured and not really incorporated into the (later) Christian tradition in any great detail until Aristotle's works—now translated into and commented upon in Arabic—were recovered and translated into Latin in the 12th and 13th centuries – then in particular in the work of Thomas of Aquinas.

Instead, the period between 200 and 500 CE saw the gradual and increasing influence of Neo-Platonic philosophy. For example, Plotinus combines Aristotelian and Platonic thought by making a hierarchy of being that differentiates between three levels of being, in descending order: the One, the divine mind and the soul. This ontological order places the sensible or material world at the fourth and

lowest level, and serves as the fundamental structure for Plotinus's understanding of the world. He takes Aristotle's identity theory of knowledge⁵³ as a significant principle in his theory of the soul. According to Plotinus that higher part of the soul is always reflecting and is therefore eternally identical with what it contemplates. This is the unchangeable and immortal part of the soul, by which we fused into the intelligible world at the true centre of our being. Thus when the soul turns its focus upon its true self, it discovers the intelligible world/the realm of Ideas, which is identical with the divine mind. This is how the intelligible world come to be imagined as an inner world. By looking inward the soul discovers that it is at its roots identical with the intelligible world. Further, by turning inwards the soul is also necessarily turning away from the sensible world outside. The soul is divided into a higher and lower part, the higher part continuously contemplating, thus identical to the divine mind and therefore the place we find God, while the lower part exists in the realm of bodies. For Plotinus the turn inwards is a turn to find God, and looking within one soul is not like vision but like contemplation. He wants to emphasise that the knower and the known are identical and therefore the soul is divine. The soul is not perfect—it can suffer defects of knowledge—as it reflects only fragmentations of the intelligible world like a broken mirror (Cary 2000, 25–28, 45–48).

In this context, early Christian church fathers sought to establish some basic principles of a Christian doctrine of the soul in light of the doctrine of resurrection—a mysterious and highly controversial notion, of course, yet one nonetheless central to the New Testament narratives—using Greek and Latin philosophical terms (and hence concepts and meanings), yet without undermining the ultimate authority of Scripture.⁵⁴ In addition there was a problem of translation from the Hebrew of the Jewish tradition—in which Christianity had some of its roots—to the Greek/Latin that had become the language of scholarship (including Christian scholarship). Jewish concepts such as *nepesh*, which was often translated to the Greek term *psūchê*, did not bring with it any of the dualist

⁵³ For more on Aristotle's identity theory of knowledge, see Matthews in Stump and Kretzman (2001).

⁵⁴ For more on the Greek and Latin Church fathers, see MacDonald (2003), and Martin and Barresi (2006).

conceptions associated with the Greek concept found in Plato's middle period works or Hellenistic (Hippocratic) medicine. In post-Classical Greek, *psūché* or soul was a term used of an immaterial or at least invisible, essential core of human beings, one that could be thought of as distinct from, and exceeding, the body. But such an idea was in every way alien to the Jewish scriptural traditions, or what Christian scholars now referred to as the Old Testament (OT) (MacDonald 2003, 90). Likewise, the New Testament (NT) writings of St. Paul—written in the form of epistles responding to specific ecclesiastical contexts, and not even remotely organized as thematic philosophical treatises—proved equally vague and ambiguous when it came to offering an account of the metaphysics of human nature.

This was the milieu Augustine was in. In particular his outlook was influenced by Plato's doctrines as they were transmitted to him through Plotinus, and they played a crucial role in his spiritual development (Taylor 1989, 129). Most importantly Plotinus's philosophy gives Augustine an explanation of the inner connection between God and the soul. For Augustine, the soul's ability to see intelligible truths that we find in Plato is fundamental, as this is how he accounts for the soul's ability to *see* God.⁵⁵ Augustine conceived of the self as a private inner space as a solution to a specific problem he had – how to locate God within the soul, without affirming the divinity of the soul. He wants (like Plotinus) to find the divine within the self, while affirming (as an orthodox Christian) that the divine is wholly other than the self. He solves this problem by locating God not only within the soul but above it (as its Creator) thus modifying Plotinus; turn 'into the inside' into a movement in and then up – first entering within the soul and then looking above it. The concept of private inner space arises as a consequence of this modification, for the place in which we find ourselves when we have entered with in (and not yet looked up) is our very own space – an inner world of human memory and thought, not identical with the intelligible world of the divine mind

⁵⁵ This metaphor is not without problems. It does not explain intelligibility but only compares it with visibility – that is, it likens intelligibility to precisely what it is not. From *Phaedo* to the *Confessions*, Platonism insisted that seeing with the eye of the body is a hindrance to seeing with the eye of the mind, and that it is of the utmost importance to know the difference between the two.

(Cary 2000, 140).⁵⁶

Augustine understands the Christian opposition between the spirit and the flesh with the aid of the Platonic distinction (as transmitted to him through Plotinus) between the bodily and the non-bodily. He also took over the dichotomy of the eternal and immutable vs. the temporal and ever changing. The realm of ideas in Plato became the thoughts of God on Augustine's account. So there is as Taylor points out 'striking elements of continuity' between the two doctrines (1989, Part II, Chapter six). But the difference as he also remarks is *how* the same opposition of spirit/matter, higher/lower, eternal/temporal, and immutable/changing are described. While Plato does not frame them in the dichotomy of inner/outer, Augustine, not only occasionally and peripherally, but centrally and essentially does. For instance, in the *de Trinitate*, XII.I, he distinguishes between the inner and the outer man. The outer is the bodily, what we have in common with the beasts, including even our senses, and the memory storage of our outer images of outer things. The inner is the soul. And this is not just one way of describing the differences for Augustine. It is in a sense the most important one for our spiritual purposes, because the road from the lower to the higher, the crucial shift in direction, passes through our attending to our selves as *inner* (Taylor 1989, 129). Despite the continuity of metaphysical theory, the turn inwards is a striking difference to Plato –were the Platonists to acquire the concept of inner space, it would be considered a public realm not private, as the goods in it are common possessions rather than private property (Cary 2000, 4).

The reason for Augustine arguing this way seems to be his concern to show that God is to be found not only in the world, but also at the very core of the person. Hence we can see the crucial importance of the language of inwardness for Augustine. With him comes a shift in the understanding of moral sources, where the route to higher understanding passes through a radical reflexivity. Augustine is the root of the particular strand of Western Spirituality, which sought certainty of God within. As Taylor points out:

⁵⁶ This will be considered in more detail in section 3.3.

The step was a fateful one, because we have certainly made a big thing of the first person-standpoint. The modern epistemological traditions from Descartes, and all that has flowed from it in modern culture, has made this standpoint fundamental – to the point of aberration, one might think. It has gone as far as generating the view that there is a special domain of inner objects available only from this standpoint; or the notion that the vantage point of the 'I think' is somehow outside the world of things we experience (Taylor 1989, 131).

Still, there are remnants of the Aristotelian view of the soul in Augustine's understanding, such as the idea of the vegetative, sensitive, and rational soul. There is a development from his first understanding of human nature in his Manichean phase, through his Platonist and Neo-Platonist studies to his conversion to Christianity, where St. Paul's epistles played an important role. In his last phase Augustine's concern is to reconcile Platonic concepts with NT accounts of the soul and the accounts of Adam's creation found in Genesis.⁵⁷

In Augustine's terminology, *anima* is used to denote the soul in both humans and animals, while the term *animus* is reserved for rational human beings and designates the seat of the mind and the will (O'Daly 1987, 7). Augustine understands the soul (*anima*) as something every bodily living being in nature has. In plants, the (vegetative) soul is responsible for nourishment, growth and reproduction. In animals, the (sensitive) soul has an additional dimension: it is also the source of sensation and appetite. While humans have the capacities of both the vegetative and the sensitive soul, they also have the capacity of rational thinking, which is unique for human beings.

In Augustine's chain of being, God is the only being that is absolutely unchangeable and located 'at the top', so to speak, while the bodies that change in time and space are 'at the bottom'. In between these, stands the soul, which is only changeable in time (not space) and is capable of either turning its direction towards the bodily realm or towards God. In other words, Augustine regards the soul and the body as

⁵⁷ Augustine continuously reviews his view of the soul and there is no one account of the mind/body union running through Augustine's work (see MacDonald 2003, 143). Scholars disagree how much of Plato's mystical text Augustine had access to, therefore there is some disagreement as to how Augustine is best understood.

two components that together make up the human being. While a human being is a rational soul which has a body, the human being is still a single substance – even though Augustine is not able to give a fully adequate description of this union, but resorts to comparing it to the mystery of the incarnation. In any case, in maintaining this union between the soul and the body he is adamantly opposed to understanding the soul as ‘trapped’ in the body or placed there as a punishment for sin, thereby rejecting the Origenist view of the sensible world as created for the purpose of such divine punishment. Rather, Augustine came to believe—as is evident in *The City of God*—that since God the Creator made animal flesh, it must be good in itself, according to its own kind, and on its own level.

Augustine thus continues and develops the notion of the soul as immaterial and immortal—thought not as a ‘substance’ in anyway—that had earlier emerged with Plato and was developed and transmitted by the Neo-Platonic philosopher Plotinus (Cary 2000, 25–48; Taylor 1989, 129). The significant development of the soul, in Augustine, lies in his articulation of the soul as a private inner space with the crucial difference in that he saw the soul as different from God (contrary to Plotinus). Rather, the soul belongs to the realm of creatures made (*ex nihilo*) by God, and depending entirely on God for their very existence. Thus, Augustine, together with his teacher Ambrose, were ‘the first Latin Christian writers to maintain that the human soul is incorporeal [in the sense it was a private inner space with no specific material extension; they did not consider it to be a substance]; by the 13th century the scholastics simply assume that this is in the Bible, because they assume that “spirit” means “incorporeal substance”’ (Menn 2002, 23). Augustine’s main contribution to the development of the ‘soul’ was this remarkable idea that the Christian soul—despite biblical and patristic ambiguities—is a private inner space within each human person where they can find God. The implications of this shift drawn out by following scholars were that the soul as a substance is both immortal and immaterial.

The Soul as Form Reintroduced - Aquinas

The arrival of Graeco-Arabic scholarship in the form of Islamic treaties and commentaries posed some difficult problems for twelfth- and thirteenth-century scholastic philosophers: how to reconcile conflicting statements about central

Christian tenets? Very crudely, one could say that the philosophies of Plato (for example the *Timaeus*) and the Neo-Platonists (especially Plotinus, but also Porphyry and Proclus) had been slowly accommodated into the over-all Christian doctrinal framework through the syncretistic labours of the Church Fathers, reaching its brilliant culmination in Augustine. But Aristotle was quite another matter; after the recovery and reception of Aristotle's work via the Islamic route, reconciliation of his metaphysical principles with Christian teaching became one of the pre-eminent tasks for Western theologians. St. Thomas Aquinas (1224-74) is an example of such an attempt to make 'the First Master's' understanding of the nature and functions of soul and mind harmonize with some of the basic tenets of the OT, especially the *Genesis* accounts, and the all-important NT statements about the human soul and divine spirit (MacDonald 2003, 178).

Aquinas defines the soul as 'the first principle of life' and most of his initial efforts are concerned with how to understand the notion of life that is fundamental to actual living substances. Not all material substances are living beings; therefore being material does not itself constitute life. By using the Aristotelian notion of substantial form, Aquinas was able to account for the fact that bodies organised in particular ways have the principle of life; 'the first principle of life in a living body, its soul, is not a bodily part of that body, but rather its form, one of two metaphysical parts of the composite of matter and form that absolutely every body is' (MacDonald 2003, 185). Aquinas, then accepts Aristotle's claims that there are three kinds of souls; a vegetative soul in plants, a sensitive soul in animals and a rational soul in human beings.

Human beings have only one soul, but its capacities include the capacities of the others (vegetative and sensitive) souls. It has the powers to grow and reproduce of plants, and the sensory and locomotive capacities of animals. In addition there are the rational capacities—the power to think and to will—which are the specific capacities of the mind that distinguish humans from animals. We might note here that unlike many modern philosophers, Aquinas does not identify the mind with consciousness. For Aquinas, a human being is not identical to its soul. Imagined on its own, the soul is neither the self nor the individual. In fact, the soul cannot really be imagined on its own in this way at all. A complete human being is a body and

rational soul as one single whole: '[A]lthough the soul itself has no place of its own among individuals sorted out in the species and genera of substances, it is what gives the human being its unique place in that system, what enables that human being to satisfy [the criterion]' (Kretzmann and Stump 1993, 135). As we will see in a later chapter, this view of the soul is best seen in relation to Aquinas's metaphysics of form and matter.⁵⁸

Saving Immortality – The Renaissance

The term 'the Renaissance' is often used of the cultural and historical context during the 15th and 16th centuries when the texts of Plato, the Stoics, and the Epicureans were rediscovered and translated into new Latin texts. The early Renaissance was dominated by Aristotle's *De Anima* and *Parva Naturalia* as well as the Thomistic interpretation of Aristotle and the Thomist view of human nature. Texts such as Aristotle's *de Anima* were translated to new Latin editions and became principal reading in university syllabi. In the second stage of the Renaissance, however, non-Thomistic views came more into favour. Newly-discovered Platonic and Neo-platonic works were translated and disseminated, influencing Renaissance thinkers profoundly. While the main body of Aristotle's work had been assimilated into Christian thought by the great scholars of the late 12th and 13th centuries, Plato's dialogues had mostly been filtered through other ancient writers (some were even unknown). The Renaissance hence played an important role in the shift from 'medieval' to 'modern' accounts of body, soul and mind, and provided an important foundation for the theories of the body, soul and mind that were to emerge in the early modern period. Though the initial interest with the Greek and Latin writer was their brilliance in rhetoric, the subject matter of the essence of human nature soon became a concern for the humanists as well; classical studies on the physical, natural and moral elements of human beings were introduced (MacDonald 2003, 206).

Since the early thirteenth century, as we have seen, there had been an acknowledged tension between Plato's view of the soul as (immortal) self and

⁵⁸ Due to the limited scope of this chapter the discussion on the souls subsistence is deliberately left out.

Aristotle's view of the soul as animating the body. The key problem was whether the rational soul is the form of the body, or a substance in its own right, or maybe both. There were issues with each alternative. If the rational soul were the form of the body but not a substance in its own right, then it would be hard to account for its immortality after the body had died. But it was equally complicated to see how the rational soul, which is form without matter, could be a substance. And on the presumption that the rational soul were a substance, it was difficult to see how one could then account for the unity of the person (Martin and Barresi 2006, 95). Until the Renaissance the recognized tension between the two main 'roles' of the soul had been somewhat downplayed; in a sense, the soul had harmoniously fulfilled two quite different roles; it served as the body's locus for its vital and cognitive activities *and* it was the vehicle of personal immortality and thus in some way separable from the body. Now, however, this tension came to be seen as a blunt contradiction; the two came to be considered opposing features of the soul (Michael 2000, 147).

The discussion centred on the immortality of the soul and the material nature of the body – and on keeping one's statements on these issues in accordance with the imperatives of the Catholic councils and later Protestant reformations. In short, the denial of personal immortality and the soul's mortality in the Aristotelian tradition came to be perceived as a threat to sound Christian doctrine, and in 1513, during the eighth session of Pope Leo X, the Lateran Council responded in a way the Church had never before. For the explicit purpose of correcting the current 'extremely pernicious errors' found in the schools—namely that the soul is mortal [i.e. Alexander's view] or one in all men [i.e. Averroes' view]— the Church issued a dogmatic declaration asserting the immortality of the human soul. Furthermore, the same Lateran Council issued the unprecedented request that philosophers attack these errors and prove the soul's immortality by natural reason, not faith alone.

This was not left uncontested. For example, three years later, in 1516, Pietro

Pomponazzi's short text *On the Immortality of the Soul*, was printed.⁵⁹ Adopting the Thomistic account of the human soul, Pomponazzi argued that from this view it follows that each human rational soul is material and hence *mortal*.⁶⁰ What Pomponazzi claimed here in fact corresponded largely to the received Thomistic tradition. Calling the soul 'material', he does not—as the Stoics and Epicureans—claim that the soul *is* the body. Rather, he is following Aquinas, who argued that the rational soul is a substantial form. However, by claiming that the rational soul in *all* its activities is reliant on the body and therefore is inseparable from matter and therefore must be mortal, he diverges from Aquinas. More importantly for his own fate, in stressing the mortality of human nature, he thus challenged the ideal of otherworldly contemplation, which finds its necessary fulfilment in an afterlife. For Pomponazzi, present life was its own reward.⁶¹ Venetian clergy considered this highly offensive; Pomponazzi's book was burnt and he himself was declared a heretic.

The Lateran Council's sharp reaction to Pomponazzi's views, and its explicit endorsement of philosophical works demonstrating the immortality of the soul, had long-reaching consequences. It became a problem for the next century and a half that was routinely considered in discussions of human nature and the soul. For example, when Descartes writes his preface to the *Meditations*, he explicitly places his work in relation to these Renaissance developments:

As regards the soul, many people have considered that it is not easy to discover its nature, and some have even had the audacity to assert that, as far as human reasoning goes, there are persuasive grounds for holding that the soul dies along with the body and that the opposite view is based on faith alone. But in its eight session the Lateran Council held under Leo X condemned those who take this position, and expressly enjoined Christian philosophers to refute their arguments and use all their powers to establish the truth; so I have not hesitated to attempt this task as well (Rene Descartes 1985, 4 Meditation on First Philosophy, AT VII, 3).

⁵⁹ Similar motivations can be found in Kenelm Digby (1665) *Two Treaties: In the One of which the Nature of Bodies; in the Other the Nature of Mans Soule is Looked into in the way of Discovery of the Immortality of Reasonable Soules*; and Pierre Gassendi (1658) *Syntagma philosophicum in Opera omnia*.

⁶⁰ For a summary of his argument see Michael (2000, 154–155).

⁶¹ This change is affiliated with the turn inwards and the shift in sources of the moral good, as it is no longer a turning inwards and up to find the source of good, such as we saw with Augustine.

With the Renaissance developments, the previous comfort with the commonly accepted Thomistic tradition became dishevelled, and non-Thomistic/Aristotelian views gained official assent and increasing general popularity. These in turn set out the foundations for the early modern theories of mind.

Four Enlightenment Shifts

In the period that followed, four specific shifts in the view of the soul towards a notion of the self warrant attention for the present purposes. First, there is a shift towards a mechanical view of human nature that sets the soul aside, where Hobbes is one example. Descartes exemplifies the second shift, namely the cementation of the notion of an *inner* self via a complete rearrangement of the received Aristotelian characteristics of the soul. Third, there was an increasing interest in the self and personal identity, as exemplified in the work of Locke. And finally, there was the emergence of empirical approaches to the study of human nature and the mind, as found in Hume and Kant, who in different ways came to shape the birth of the 'science' of psychology.

What is distinctive about this period is hence not Cartesian dualism per se, but rather the new understanding of matter as mechanical and atomistic that was ushered in by the emergence of modern science. Hobbes is an example of this shift. He identifies life with the mere motion of limbs—'the heart is but a spring'—and thus human beings (and he does not distinguish sharply between humans and animals) to engines – albeit self-seeking and self-motivating ones. Hobbes' emphasis on science seems to restrict the world to the material, and so humans are ultimately elaborate machines, without any essence or form (Trigg 1999, 2nd, 50–59).⁶² In *De Corpore* Hobbes gives an account of reasoning in terms of computation:

By reasoning, I understand computation. And to compute is to collect the sum of many things added together at the same time, or to know the remainder

⁶² He tells a causal story concerning perception, viewing it as a causal chain of motion. As Stewart Duncan summarises it: '*The object causes (immediately or mediately) pressure on the sense organ, which causes motion inside us, all the way to the 'brain and heart'. And there this motion causes 'a resistance, or counter-pressure, or endeavour of the heart to deliver itself; which endeavour, because outward, seemeth to be some matter without. And this seeming, or fancy, is that which men call sense' (Hobbes 1651, 1.4). Quite why this endeavour from inside to out should make the sensation seem to come from outside is unclear, for things coming from outside should be moving the other way. At any rate, the sensation is strongly grounded in, perhaps even identical with, the internal motion' (Duncan 2012)*

when one thing has been taken from another. To reason therefore is the same as to add or to subtract (Hobbes 1981, 177).

Reasoning is a purely mechanical process to do with the association of sensory images in the brain. The difference from Plato is immediately clear. Since for Hobbes, sensation and imagination are nothing but ‘diverse motions’, which again are purely natural functions of the brain, there is simply no need to posit an incorporeal soul over and above the material body.

The word ‘consciousness’ (or its equivalents in Latin or French) was not much discussed at the time, since (until Descartes) the presumption was that sensory awareness was roughly the same in animals as in humans; what set them apart from each other was rationality, which—as we have seen—Hobbes gave a materialistic account for. While Descartes would understand *self*-consciousness to be a specifically human trait, Hobbes argued (in his second objections to Descartes) that we are in fact never conscious of ourselves; we only remember our previous thoughts. However, Hobbes does acknowledge that there is a sort of awareness of ourselves as subjects, but holds that we can never directly introspect to behold directly the nature of the self.

Hobbes found the very notion of an immaterial soul, incoherent and self-contradictory and the notion of introducing it along side a mechanical view of the world as incomprehensible. Similarly, it was a mechanistic conception of the material world that was the driving force behind Descartes’ meditations. As we have seen, Descartes sought to integrate the new foundations for physics with a specific strand of theology articulated by the Lateran Council. Rather than being concerned, then, with the so-called ‘interaction problem’ and the relation between (or union of) mind and body—which he indeed considered to be an evidential fact⁶³—his focus was (like his Renaissance predecessors) on the distinction between the soul and the body, and hence the immortality of the soul. Elaborating on the idea of the mind, he developed his ideas in the opposite direction from

⁶³ *‘There are two facts about the human soul on which depend all the knowledge we can have of its nature. The first is that it thinks, the second is that, being united to the body, it can act and be acted upon along with it.’* Descartes in a letter to Elisabeth, 21 May, 1643 (At III: 664-5; CSMK III:217-18).

Hobbes, arguing that not only were the mind (rational soul) and body distinct in terms of material vs. immaterial, extended vs. unextended, and so on, but also in terms of thinking vs. unthinking. In other words, only the human mind experiences sense ideas, images or thoughts. Thus, Descartes denied the body any of the cognitive activities that had previously been accounted for by the notions of the sensitive or organic soul. Descartes reorganises Aristotle's categories of the three kinds of soul, making all its former capacities and powers—except cognition—part of the mechanical body alone. In other words, the emphasis in regards to the human being has shifted from soul to rational mind (MacDonald 2003, 279–282).

For Descartes, this move is then followed by the question of what this 'I' that exists actually is:

What then did I formerly think I was? ... I propose to concentrate on what come into my thoughts spontaneously and quite naturally whenever I used to consider what I was... As to the nature of this soul (anima), either I did not think about this or else I imagined it to be something tenuous, like wind or fire or either which permeated my more solid parts.' (Descartes, Second Meditations, as quoted by MacDonald 2003, 279)

Descartes goes on to reflect that these ideas are imagistic thoughts derived from sensory perceptions of sensible things such as fire and breath, and that at that time he had no reason to trust what his senses told him about the world. On this basis he makes his next inference: 'I am then in the strict sense only a thing that thinks; that is, I am a mind or intelligence or intellect or reason – words whose meaning I have been ignorant of until now' (CSM II.17-18). Here, Descartes rejects the most dominant and popular notions among his contemporaries concerning the soul—that it must be some sort of 'breath' or 'fire' or 'inner heat'—replacing it with the idea of a thinking thing – a mind⁶⁴, thus exemplifying a new account of the nature

⁶⁴ While it has been said by Cartesian scholars that Descartes did not distinguish between mind and soul and that they can be interchanged without loss of meaning, this is not true in all instances, for there are indeed passages (especially in his replies to the objections) where Descartes carefully segregates their meanings. Such as he does in his response to Gassendi in the Fifth replies, where he clearly makes a point of the ambiguity in the meaning of 'soul', saying further that his task as a philosopher is to amend the meaning of concepts when it is noticed that others misunderstand them. To avoid such ambiguity he therefore chooses to use the concept mind, as he '*considers the mind not as part of the soul, but as the thinking soul in its entirety*'. He goes on in the same section to ponder on the origin of the concept of the soul. (CSM II. 246). Michael Frede (1992, 93–95) has this to say on Descartes' use of the 'soul' and 'mind': If there is a preference for the term 'mind', it is

and function of the mind, as well as a new view of human nature.⁶⁵

A third shift is exemplified in the work of Locke, one from issues regarding the immaterial soul to the issues of 'personal identity' and 'self'. When Locke wrote *An Essay Concerning Human Understanding* (1689), his aim was to establish a science of human nature. But several *a priori* assumptions—such as the Cartesian notion that all consciousness is reflexive—made it difficult to develop such a full-fledged empirical approach. He suggested that matter might indeed be capable of thinking, while still seeking to accommodate this claim to the doctrine of resurrection. This led him to a particular view on personal identity, as well as to suggesting that the immateriality of the soul was in fact not particularly important.

Locke's account of personal identity is found in the addition to the 2nd edition of the *Essay*, as part of a general account of identity as such. Locke distinguishes between 'man' and 'person': a man is a living body of a particular shape; a person is 'an intelligent thinking being that can know itself as itself the same thinking thing in different times and places' (Locke 2005, 366). In short, this distinction between man and person allowed Locke to argue that it is possible for the same person to have his personal identity preserved even though he is resurrected in another body. Here Locke introduces a thought experiment to exemplify his point; a prince and a cobbler both wake up one morning. But the person with the cobbler's body wakes up with the prince's memories, and the person with the body of the prince wakes up with all of the cobbler's memories. As most people infer that the two have switched bodies, Locke concludes that personal identity is tied to

because Descartes is rejecting a certain conception of the soul, that of the scholastic Aristotelians, which he wants to replace by another conception. And so he finds it convenient and appropriate to use the term 'mind', rather than the term 'soul', when he wants to talk about the soul as he himself conceives it.' This shows that Descartes is not by his use and analysis of the functions and powers of the 'mind' wanting to carry forward or expand the previous notions of *nous*, *psūchē*, *intellectus* or *impenium*. But rather, as Frede argues, Descartes is rejecting and redefining the 'primitive' and scholastic versions of the soul as that which explains a living thing's life, including nourishment, self-motivation and reproduction. Instead, as mentioned before, Descartes has a new scientifically informed notion of the physical world as a whole, where everything, whether living or non-living can be explained in terms of matter and its properties as expressed through mechanical laws.

⁶⁵ *Before his meditations began, the author stated that he would offer proof of the soul's immaterial status; but by the end of the Sixth Meditation no such proof of the soul's immortal status has been offered. Perhaps this is because in the course of the Second Meditations he had to abandon the very concept of soul and all of its preconceived attributes in favour of its replacement, the mind, for which he cannot elicit the attribute of immortality' (MacDonald 2003, 280).*

psychological continuity rather than anything bodily. Locke thus cemented the notion that consciousness is disembodied, and furthermore made a distinction between consciousness and the soul. His critics claimed he had thus made the soul dispensable. Up until then, the soul had been the main concept in the belief in immortality, as well as being the essence of a human being, enabling us to think and feel. In the emerging empirical science of human nature, however, there was no longer room for the soul. By the end of the eighteenth century, the Lockean notion of matter no longer seemed as far fetched as his critics had considered it to be, and the debates concerning human nature generally tended to be less concerned with the immaterial soul. Now, interest had shifted to finding a more empirical account for human nature, as well as notions such as the self and personal identity.

The final shift to be recounted here is one towards a more empirical and experimental approach to the study of human nature, as exemplified here in the work of Hume and Kant. David Hume (1711-1776) might be fruitfully cast as the first 'post-sceptical' philosopher of the early modern period. While his predecessors, especially the Cartesians, had tried to disprove philosophical scepticism, Hume was a self-proclaimed sceptic who consciously developed a philosophical perspective that was at the same time both sceptical and constructive. In short, we might say that Hume was a sceptic in the sense that he disagreed with the Cartesian and rationalist notion that knowledge had a firm and reliable foundation. Yet his views were constructive in the sense that he sought to establish an empirical philosophy of human nature as the foundation for all sciences, including morals and politics. He applied this sceptical empiricist stance to explain the principles of human nature according to the Newtonian science of matter (Brio 1993, 34). His proposed method was one of 'careful and exact experiments' aiming to 'render all our principles as universal as possible.' This, consequently, requires 'tracing up our experiments to the utmost, and expelling all effects from the simplest and fewest causes' (*Treatise*, Intro, xvi, xvii). Hume understood human nature in terms of individuals, and his concern was the nature of the individual 'self'. However, since this 'self' itself eluded the kind of empirical scientific investigation he proposed, Hume concluded that it hence appears that

the 'I' must be reducible to merely a succession of different experiences with nothing to hold them together. All beliefs, according to Hume, are the results of recurring experiences and are explained by the laws of association – and this also applies to beliefs in metaphysical entities such as the soul or the mind. Thus, the 'mind' is no more than the perceptions we are having at any given moment.

Hume's attempt to establish a science of human nature—what eventually would become the field of psychology—helped reinforce the shift away from the soul and the issues concerning its immaterial and immortal nature, towards notions of the mind, self and personal identity. However, it was Immanuel Kant's (1724-1804) model of the mind that was to become dominant. While out of favour during the relatively short high day of Behaviourism, Kant's ideas regained importance in the 20th century.⁶⁶ Broadly speaking, Kant understood the mind as a complex set of functions or abilities. These abilities were crucial to knowledge generating activities, perception, and application of concepts to sensory inputs.

Aporia and Dismissals

Generally speaking, nineteenth-century analyses of the 'self' came to treat what had been a source of explanation—replacing the soul in the process—as itself requiring explanation. As a result, the 'self' lost its relatively short-lived elevated status, and was by the beginning of the twentieth century being fragmented and dispersed both across and within disciplines (Martin and Barresi 2006). This fragmentation has led to a number of both intra- and cross-disciplinary aporia. Despite Hume's hopes, when psychology emerged as a distinct scientific domain in the late nineteenth century, its approach to the question of human nature did not include serious ventures into epistemology and metaphysics.

Instead, as the new field struggled to get a foothold in the world of science, its practitioners realised that they could not make any conclusive claims on these issues (or wait for any such to be made by others) – and so they were all too happy to concentrate on the functioning of the mind and functionalist explanations for

⁶⁶ For example, important features of the accounts of the mind of thinkers as different as Sigmund Freud and Jerry Fodor are broadly Kantian.

human behaviour. In so doing, certain issues had to be (and still are) taken for granted – issues that indeed are considered deeply questionable by practitioners in the neighbouring field of philosophy in general and philosophy of mind in particular. Furthermore, new sub-disciplines such as Experimental psychology, Developmental psychology and sociology have later sought the sources of ‘self’ and personhood (and their development) within a purely social context. While this approach effectively sidestepped the implicit individualism characterizing earlier forms of psychology, metaphysical issues were also here left out from the start. Simultaneously, while Analytic philosophy has been very much concerned with the metaphysical and ontological aspects of the mind, personal identity and the self, the starting point for most explorations continues to be the individual – imagined apart from the social and environmental contexts appreciated by the more experimental approaches. Crucially, in either case, it is the ‘self’ that is sought – the notion of ‘soul’ is now considered completely passé.

But while the notion of the self thus appears strongly embedded in our modern Western culture—and the above recounted historical-intellectual shift from ‘soul’ to ‘self’ in this sense being completed—the self is not at all on ontological safe ground. In psychology, for instance, there has been a general rejection of the view of the ‘mind’ or ‘self’ as ultimately separate from the brain – or, to put it differently, it is considered reducible to matter (which is still, as we have seen, understood in the Cartesian sense). We might say that this reductionism comes in two variants. First, it is seen in the emergence of Experimental psychology—for instance in the work of John Stuart Mill, Alexander Bain and William Wundt—where the emphasis has been on empirical observation of bodily behaviour, including the physiology of the brain and nervous system. Here, the ‘mind’ or ‘self’ is simply identified with the brain – or left out as something one cannot speak of on any empirical basis. A second form of reductionism can be seen in social psychology and Developmental psychology—for instance in the work of William James, George Herbert Mead and Lev Vygotsky—where the emphasis has been on ‘mind’ and ‘self’ as notions ultimately arising or ‘emerging’ out of social interaction. Here, selves are viewed as products of rather than preconditions for social interaction, and do not exist as immaterial substances. Both of these variations have continued up till the present

in the prevalence of neuroscience, the embodied cognition movement and in the research regarding the social-cognitive notions of self. In all of these, the self is no longer regarded as an ultimately real object, but instead—as Daniel Dennett puts it—ultimately merely a convenient fiction, in the same sense that any material object’s ‘centre of gravity’ is a useful way of describing something that is not ultimately real.

The Emergence and Descent of the Self

We have seen how the soul as a scientific concept was marginalised, losing ground to novel notions of ‘mind’ and ‘self’ – both of which were perceived to be more intimately tied to the body and brain. With thinkers such as Descartes and Locke, the ‘self’ replaced the soul as the unifying feature of personal identity and the seat of free will and cognition. However, by the end of the twentieth century it became increasingly clear that the notion of ‘self’ did not provide the explanations required of it, but instead spurred innumerable *aporia* and new questions. Partly in response to these philosophical *aporia*, scientific practitioners have shared with philosophers (of various traditions) a continued focus on the human organism, and a range of scientific theories and methodologies have divided the (human) self into more manageable—but ultimately inadequate—concepts such as personal self, social self, spiritual self, self-image, and so on. Thus, both ‘soul’ and ‘self’ have—apparently—failed to provide a unifying feature of the human being, and the slow turn from soul to self seems to be leading to their joint final dismissal. It would seem that the only, and indeed currently most acclaimed, option left is that the unifying feature of human beings must instead be sought at the level of the material organism; the body; or rather, the brain.

3.3 The Turn Inwards

The turn away from the ‘soul’ as the unifying feature of the human being, to the notion of a personal ‘self’ is intertwined with another development which might be dubbed ‘the turn inwards’. Having an inner subjective realm at the ‘centre’ of our being in contrast to external reality is an assumption that is treated as a given in most if not all contemporary theorizing about the soul, the mind, the self, and the first person view of reality. However, as Taylor observes, this notion of an ‘inner

realm' is far from universal; it is historically and culturally conditioned and might very well have been otherwise.

Strong as this partitioning of the world appears to us, as solid as this localisation may seem and anchored in the very nature of the human agent, it is in large part a feature of our world, the world of modern, Western people. The localisation is not a universal one, which human beings recognise as a matter of course as they do for instance that their heads are above their torsos. Rather it is a function of a historically limited mode of self-interpretation, one which has become dominant in the modern West and which may indeed spread thence to other parts of the globe, but which had a beginning in time and space and may have an end... (Taylor 1989, 111)

As will be argued below, it is only after Augustine that a robust notion of any kind of inner self came to be entertained. Classical texts in Western tradition such as the biblical canon, Plato and Aristotle talk about human nature without any recourse to the idea of a private inner space – a concept so familiar to modern Westerners that we would feel alienated without it (Cary 2000, 9). This section will trace the emergence of this peculiar modern and Western idea of a private inner space.⁶⁷ More precisely, it will outline certain key points in the rise and development of the sense of *inwardness* that features in the Cartesian framework. The three main aspects here are the shift in the understanding of the source of moral good; radical reflexivity paired with the disengaged stance (making the 1st/3rd person distinction possible); and the idea of the inner self as something mouldable. It starts with Plato, briefly touching on Plotinus before looking at Augustine, followed by Descartes and Locke and a brief mention of Montaigne, and ending with a brief summary and note on the influence of the reformation.⁶⁸

⁶⁷ While there is obvious overlap, this is a slightly different narrative than the one covered in the previous section 3.2. In many ways the notion of a private inner space pre-empts it; without an internal realm there would be no space that the soul could inhabit.

⁶⁸ This is succinctly summarised by Phillip Cary: *'The oldest snap shot is Plato's picture in the Allegory of the Cave: eye that has escaped from bondage in the lower darkness is now gazing upward, away from itself, at the sun. There is no inwardness here, but there is a key concept, intelligibility or intellectual vision, which will be at the heart of later Platonist inwardness. The next snapshot gives us the much less familiar picture of Plotinus: the soul is like a sphere revolving around the source of all light in the centre of the universe and turning inward to see it. Our particular souls are each points of light on the revolving sphere, capable of looking outward upon the darkness or turning inwards to behold the realm of light. The inner real is the Platonist's "intelligible world", which has now become an inner world – although unlike Augustine's inner space it is common to all, not private. Augustine's picture comes third, and it is of an inner space, with great courtyard open to the sun. To see the light means both entering within and looking upward – combining Plotinus's inward turn with Plato's ascent to vision. The result is that what you find when you turn inward but not upward, is your own private inner space. Last, there is John Locke's picture of a dark room where there is nothing to see but*

Plato's Unification of the Soul.

The turn to 'inwardness is', writes Cary, 'the story of how Westerners developed the desire to see within the soul and therefore came to conceive of the soul doing what no eye ever did: turning to look within its own self' (Cary 2000, 9). Prior to Plato, in the Homeric tradition, we find no notion of a unified soul related to the realm of ideas. In fact there is an absence in Homer of words that can easily be translated into the contemporary concept of 'mind', or even 'soul' in the post-Platonic sense of designating a single centre where all our feelings and thoughts originate (Snell 1960). In early Greek thought the soul, or life principle, of a person was not located in one place, but associated with various aspects of the body. Only with classical post-Socratic thinkers such as Plato does a clear shift become apparent.

Strong philosophical convictions underpin this familiar—but ultimately radically incoherent—metaphor of 'looking inward'; more than simply the idea that the soul is *in* the body, and more even than the notion that the soul is a 'deeper' and 'better' kind of being than the body. The turn to inwardness begins to take form when the soul came to be thought of as the prime indicator of the nature of ultimate reality and final happiness. In the majority of ancient philosophies and religious outlooks — for instance among Platonists and Peripatetics, Gnostics and Manichaeans, Cicero and the Stoics—knowledge and questioning of the essence of the soul was considered to produce wisdom about divinity and good life. The legendary divine command 'Know Thyself' understood to mean 'know thy soul'—was the headline over most ancient theories on the soul, with its allusion to a promise of divine knowledge as the result of self-knowledge. Consequently, the turn inward must be seen to involve more than only a conception of the inner, human self; it is concerned with the divine, the eternal, and with ultimate reality.

Throughout Plato's works, this shift to inwardness is evident in how the soul is

images projected within. No sun shines into this room from above, and even the windows afford no direct view to the external world but only serve as a lens to project images of what is outside onto a blank inner wall. [What ties these images together is] ...the Platonic notion of intelligibility as the visibility of something to the eye of the mind. Plato's picture is intellectual vision pure and simple, Plotinus's is intellectual vision construed as inward turn, Augustine's is intellectual vision resulting from a turn first in then up, and Locke's picture is of a self with no direct intellectual vision of anything but its own private inner world, seeing only the images of things outside' (Cary 2000, 5). For further reading, see C. Taylor 1989; C. Taylor 2002; Cary 2000; Martin and Barresi 2006; and Snell 1960.

related to the realm of ideas, and it is particularly marked in his moral theory and in his theory of intelligibility. According to Plato's moral doctrine as set out in the *Republic*, human beings are (very simplified) good or 'masters of their self' when reason rules and bad when dominated by desires (while this might seem perfectly comprehensible to us, the strenuous arguments in his work testify to the fact that many of Plato's contemporaries thoroughly disagreed with this). According to Plato's argument we can then reach a higher moral state through the domain of thought or reason. When humans are ruled by desire, there is chaos, while reason brings order (*kosmos*), concord (*xumphonia*) and harmony (*harmonia*). This mastery of the self through reason brings with it three results: unity with one-self; calm; and collected self-possession. This Platonic understanding has given form to the dominant variants of moral philosophy in our culture, where thought/reason has been viewed as what orders our life for the good, while desires only prevent it. To be rational—having the ability to step back and dispassionately and calmly consider the situation, gain a clear understanding of the situation before one calmly acts—is considered the way life should be lived. The shift that occurs here by ascribing thought or reason as the source of moral good involves a new view of the agent as *unified*.

In his theory of intelligibility, Plato opens with a response to Meno's question to Socrates: how to seek knowledge that one does not already know? Plato's answer is that we already have knowledge *in* our souls, since our souls were in the realm of Ideas before they were born on earth – otherwise known as his doctrine of recollection.⁶⁹ This has the effect of enlarging our soul and its contents opening up. For Plato, to be intelligible means to be understandable, to be a fit object for the intellect or mind – and the Platonic forms are precisely such objects, since they are knowable to us in our mind/soul. In contrast material, sensible things, being subject to constant change and instability, are in principle unknowable. The turn inwards is in this sense a turn towards these previously unsuspected possibilities

⁶⁹ The *Phaedo* gives another endpoint for the after-life and a practical way to get there. For Plato the soul has a curious place in between the realm of Forms and the material world, which he explains in his story of the fall of how the soul has been trapped *in* the body. The path to the realm of Forms is one of philosophical investigation, looking at pure thought itself, separating itself from the body, preparing for the final escape and separation in the death and decay of the body.

of the soul. Plato's theory of intelligibility defines the Forms as what the mind sees, in contrast to sensible things, which are merely what the eyes of our body see. Hence, understanding the nature of intelligibility implies inquiring into the nature of the relation between the soul and the Forms. It is in the course of this investigation that the concept of inwardness develops (Cary 2000, 12–15).

In short, the new notion of the soul is that it constitutes a single site for all thought and feeling, and that it is intimately related to the realm of Ideas. But, importantly, Plato does not describe it in terms of an 'inner' world, the way Plotinus and later Augustine would do. Nor does Plato use the inner/outer distinction in the sense current philosophy does. When Plato does occasionally talk of looking into one's soul, argues Taylor (1989), he does not attach it to a perception of the intelligible worlds and its eternal forms. Rather, it appears more like an ethical self-examination, an attempt to becoming rational. Indeed, for Plato, the moral sources we accede to by reason are *not* found 'within'. They remain 'outside' of us, in the realm of ideas which he refers to as 'the intelligible place' – that is, a place that can be understood only by the intellect. Importantly, he describes this place using metaphors of heavenly height rather than inner depth. Becoming rational is not best described as something that takes place *in* us, but rather better as our connecting 'up' to the larger order in which we are placed, by turning towards the realm of Ideas.

Augustine's Invention of the Inner Space

When Augustine read Plato, he did so through the Neo-Platonic 'lenses' of Plotinus. The shift that emerged through Plotinus' combination of Aristotelian and Platonic thought was a notion of the soul as eternally identical with what it contemplates. When this contemplation is then turned to focus on its own true self, it discovers the intelligible world/realm of Ideas, which again is identical to the divine mind. Thus, the intelligible came to be imagined as an inner world. By looking inward, the soul discovers that it is—at its roots—identical with the intelligible world. Furthermore, by thus turning inwards the soul is also necessarily turning away from the sensible world 'outside'. The soul, by implication, occupies a kind of space between the divine mind and the realm of bodies, and this space is found 'internally' (Cary 2000, 25–28).

Plotinus's philosophy provided Augustine with an account first of the inner connection between God and the soul, and secondly of why we keep failing to recognise this connection and how we eventually might come to see it through faith (Cary 2000, 45–48). Plotinus had considered the turn inwards in terms of contemplation, so as to emphasise the identity between the knower and the known – thereby assuring the divine nature of the soul. Like Plotinus, Augustine also turns inwards to find God. However, in order to avoid the heretical idea of the soul's divinity, Augustine changes the metaphor of contemplation to one of vision, thus creating a 'gap' between the soul and God – implying that the God we behold is outside us, while simultaneously making the soul a *space* wherein God can be found. This metaphor is obviously not without its problems. It does not explain intelligibility but only compares it with visibility – that is, it likens intelligibility to precisely what it is not. The concept of private inner space arises as a consequence of this modification, for the place in which we find ourselves when we have entered within (and not yet looked up) is our very own space – an inner world of human memory and thought, not identical with the intelligible world or the divine mind. Once one conceives of this inner self, one must think differently about both the external and the other – a move which, as we will see, would eventually be worked out in various forms of scepticism about the external world, and raise the question of how to close the epistemic gap between the internal and the external (Cary 2000, 140).

In a similar manner, Augustine continues and develops several of Plato's famous dichotomies—spirit/matter, higher/lower, eternal/temporal, and immutability/change—but recasts them in terms of the dichotomy of inner/outer (a dichotomy not found in Plato).⁷⁰ For Augustine, the 'inner' is that which is 'hidden in the heart', it is where truth lies, and where we come to know God. God may also be known through the created order, but our principal route to God is

⁷⁰ 'For instance, in the *de Trinitate*, XII.1, he distinguishes between the inner and the outer man. The outer is the bodily, what we have in common with the beasts, including even our senses, and the memory storage of our outer images of outer things. The inner is the soul. And this is not just one way of describing the differences for Augustine. It is in a sense the most important one for our spiritual purposes, because the road from the lower to the higher, the crucial shift in direction, passes through our attending to our selves as inner' (Taylor 1989, 129).

'within'. In a sense, God is not just the thing we long to see; God is the light and the power of the eye by which we see. Hence, Augustine's 'proof' of God is rooted in what would now be called a first-person experience of knowing and reasoning. Consequently, the focus is shifted from the objects that reason knows—the Platonic realm of Ideas—to the particularised activity of *knowing* from a first-person perspective. By being aware of one's own sensing and thinking, Augustine argues, one comes to realize that there is something 'higher' common to all thinkers (something Plato had already suggested by the Ideas). Recognising that this activity is grounded in and presupposes something 'higher' then draws one to reverence – the result of looking 'inwards' is that one is drawn 'upwards'.

Despite the general continuity in terms of metaphysics, Augustine's turn inwards represents a striking difference to Plato, who would rather look to the domain of objects to discover the 'higher' organising principle or Idea. Further, even if the Platonists were to acquire a concept of inner space, it would have been considered a public rather than private realm, since the 'goods' in it are common possessions rather than private property (Cary 2000, 4). Taylor describes this as the beginning of a radical reflexive stance. For in contrast to the domain of objects, which is public and in common, the activity of knowing is here particularised; each of us alone is engaged in our own process of knowing. For Augustine the highest and ultimate source of knowledge—God—is now also found at the very core of the person.

But Augustine also exemplifies the shift in the location of the source of the moral good. In short, he reinterpreted the Christian opposition between the 'flesh' and the 'spirit' in terms of the Platonic distinction (again as transmitted to him through Plotinus) between the bodily and the non-bodily. Plato's realm of ideas became on Augustine's account the very thoughts of God. Like Plato, Augustine sees the vision of the cosmic order as the vision of reason: it is the source of moral good, and the good, for humans, is to see and love this cosmic order of things. For Plato, then, the moral condition of the soul hence depends on what it attends to and loves. Augustine, by comparison, alters the balance between love and attention, making love rather than attention the deciding factor. In light of his development of the

turn inwards, the route to higher understanding passes through a radical reflexivity. It is by inward reflection one comes to love and know God, the source of moral good. In this the distinction between the external and the internal world becomes a given starting point. In this sense, Augustine represents a vital root of that particular strand of Western spirituality which has sought the certainty of God 'within'. As Taylor points out:

The step was a fateful one, because we have certainly made a big thing of the first person-standpoint. The modern epistemological traditions from Descartes, and all that has flowed from it in modern culture, has made this standpoint fundamental – to the point of aberration, one might think. It has gone as far as generating the view that there is a special domain of inner objects available only from this standpoint; or the notion that the vantage point of the 'I think' is somehow outside the world of things we experience (Taylor 1989, 131).

With Augustine's take on Plotinus' Neo-Platonism, the soul became an 'inner' space through which one might come to know God.

Descartes' radical step

As noted above, the sceptical challenge that was merely implicit in Augustine's work—'how can one get beyond first-person experience and conclude there is a world out there?'—blossoms several centuries later in the work of Descartes. The Augustinian turn inwards shaped a typical genus of 'proofs' of the existence of God—one in stark contrast to the later Thomistic proofs of God, which all started from created reality—a genus Descartes builds on and develops.⁷¹ We can even spot the traces of Augustine in Descartes' own proof in the third Meditation:

I find in myself an idea of a sovereign, perfect and infinite being, This idea of infinity could not have been constructed on my own accord, as I would not have had the idea of myself as finite and imperfect if not the notion of infinite and perfection was already implanted in me first. Doubting and wanting are seeing myself as lacking in some respect (Descartes as quoted by Taylor 1989, 140).

The Augustinian assumption in this argument is eloquently rephrased by Taylor (1989, 141): 'I can only understand myself in the light of a perfection that goes far

⁷¹ Taylor describes their shared features as the following: 'my experience of my own thinking puts me in contact with a perfection, which one and the same time shows itself to be an essential condition of that thinking and also to be far beyond my own finite scope and powers to attain. There must then be a higher being on which all this depends, i.e. God'. (Taylor 1989, 140)

beyond my powers. How is it that this light is cast upon my thought? It is beyond my powers to have produced it myself.' Descartes concludes that this light must have come from a being who truly has these perfections.

Descartes can hence be understood as rooted in Augustine, with his proof of God's existence starting from 'within' and the emphasis on radical reflexivity or the first-person stance. But he also gives Augustinian inwardness a fundamental twist, and develops it in a completely new direction. So while we can see the similarities in their respective proofs of the existence of God—both starting from the same self-understanding of the thinking agent—there is a subtle but crucial difference of emphasis and conclusion. In Augustine's understanding the thinker comes to see more and more his lack of self-sufficiency and to grow in realization of his dependence on God in whom he has his being. For Descartes, by contrast, the main point of the reflexive turn is to acquire utter self-sufficient certainty. In a sense, the centre of gravity has shifted from God as the source of certainty through faith, and to certainty as a perception that is unconditional and self-generated. The Augustinian step from an imperfect self to a perfect God has with Descartes morphed into something different. Rather than showing that God is at the very root of my self, God has become a theorem in *my* system of perfect and 'independent' science. Indeed, the Cartesian proof of God is not a search for an encounter with God, but rather a meeting with myself with God as a theoretically neat guarantor of the meeting actually taking place. It might not have been Descartes' intention to replace Augustinian tradition in this way, but after him it could hardly be conceived in any other way.

As we have seen, the language of inner/outer does not feature in Plato. For Plato the locus of our moral strength resides outside of us in the realm of Ideas, and to be rational is to be turned towards this cosmic order, which is shaped by the Good. Even though Augustine introduces the language of inwardness to this scheme, he does not believe the moral source to be situated within us anymore than Plato does. He continues to hold the Platonic notion of the Good (God) shaping the order of things in the cosmos. The difference is that while for Plato the shift from senses to reason and attuning to the order of things is a change in the direction of the soul,

Augustine held that sin had debilitated our ability to thus direct our soul and love this order the way we should. Hence, we need to be healed from sin and we cannot do so by our own accord. Healing comes from God, whom we find within. While both Plato and Augustine see ourselves as related to moral sources outside of us (in the Idea of the Good and in God, respectively), Descartes, in a very real sense places the moral sources within us.

In the wake of Galileo's observations, the universe was increasingly understood in terms of mechanics rather than as a cosmic order embodying Ideas. On the Galilean view—in contrast to previous teleological views—knowledge is hence representational rather than participatory: to know reality is to have a correct internal representation of the external world. Certainty concerning the external world now has its locus in the mind, rather than in the realm of ideas, as for Plato.⁷² Descartes himself felt 'certain that [he could] have no knowledge of what [was] outside [him] except by means of ideas [he had] within [him]' (As quoted by Taylor 1989, 144). Knowledge is no longer achieving illumination from the realm of ideas, but it is produced bit by bit according to specific rules and principles in order to generate certainty.⁷³

In Descartes, this new approach to knowledge and the cosmos plays out in (at least) three different ways. First, his dualism of soul and body is strikingly different from that of Plato. For Plato, realising the true nature of the soul and its immortality happens when it is directed towards the eternal, immutable things,

⁷² Plato's theory of Ideas, however, implicated a very close connection between scientific explanation and moral vision. Either one has the correct understanding of both in conjunction or one understands neither. Because of this relation, when the vision of the ontic logos is replaced by the very different theory of scientific knowledge, this unavoidably changes the whole understanding of moral virtue and self-mastery.

⁷³ Descartes' scientific account of knowledge is described in the *Regulae*, and later ones in the *Discourse*. For instance, '[t]he aim of our studies should be to direct the mind with a view to forming true and sound judgements about whatever comes before it'. *Rule for the Direction of the Mind*, Rule One, ATX 359 (Rene Descartes 1985); or, '[w]e need a method if we are to investigate the truth of things...By 'a method' I mean reliable rules which are easy to apply, and such that if one follows them exactly, one will never take what is false to be true or fruitlessly expand one's mental efforts, but will gradually and constantly increase one's knowledge till one arrives at a true understanding of everything within one's capacity'. (*Rule for the Direction of the Mind*, *Rule Four*, ATX 371 and 372, Rene Descartes, 1985). So representations need to be developed along certain guidelines to generate certainty, through a chain of clear and distinct perceptions, building our thoughts from the simpler to the more complex, stripping back until one finds the one undeniable truth—in Descartes' argument the *Cogito*—in order to rebuild the entire order of representations from scratch.

and through seeing and understanding the things that surround me as participating in the ideas in which they have their being. Ideas hence exist ontologically in the external world, and Plato has access to this through his own participation in this order of being. For Descartes, by stark contrast, there is no order of Ideas one might turn to – an idea is something within the mind. The inner self or the mind has become detached from the external world, and is seen as distinctly different from it.

Secondly, understanding one's being as immaterial means clearly perceiving or discerning the ontological cleft between the external and the internal, and this further entails—on the Cartesian schema—understanding the material world as mere extension operating according to mechanical principles rather than participating in a Chain of Being. Descartes finds and affirms his own immaterial essence by objectifying his own body: in order to know reality, we must (somehow) step outside of our bodily participation in the external world and take a disengaged perspective. This is done by objectifying the world, including our own bodies, in order to see them mechanistically and functionally, like an uninvolved external observer would, taking the radical reflexive stance much further than Augustine ever did or indeed could have, on his Neo-Platonic basis.⁷⁴

Thirdly, the shift in ontology and theory of knowledge also entails a new understanding of reason as the source of moral good. In contrast to Plato's view, reason is no longer related to the order of the Good, as there is no such order. Where for Plato being rational meant being attuned to the order of the Good (and for Aristotle what had been important ethically was a sense of the proper order among the ends we pursue), for Descartes being rational or having the power of thought, means having the ability to construct orders according to particular postulated principles, which (only) thus might meet the ideal demanded by knowledge, understanding, certainty and truth. Self-mastery of reason no longer

⁷⁴ In the *Second Meditation*, Descartes describes knowledge or understanding not as facilitated by the senses, but primarily by understanding: *'The essences of bodies are not strictly perceived by the senses or the faculty of imagination, but by the intellect alone, and that this perception derives not from their being touched or seen but from their being understood'* (Rene Descartes 1985, 22 *Second Meditation*, section 34).

means aligning oneself with the order of the Good, but consists in our lives being shaped by the orders that our reasoning capacity constructs.⁷⁵ For Descartes, the hegemony of reason is much closer to our current understanding of reason: reason is a directing agency subordinating the functional domain of the passions. That is, being rational means to have one's reason rule one's desires. Although the traditional Stoic model partly influences Descartes' classification, the Cartesian view of passions is distinctly different, since his principle of explanation is different: passions are functional devices designed by God to ensure the survival or well-being of the organism in a given situation. The true function of reason for Descartes is, then:

...to examine and consider without passion the value of all perfections of body and soul that can be acquired by our conduct, so that since we are commonly obliged to deprive ourselves of some goods in order to acquire others, we shall choose better... It is enough to subject one's passions to reason; and once they are thus tamed they are sometimes useful precisely to the degree that they tend to excess (As quoted by Taylor 1989, 151).

In sum, with Descartes the hegemony of reason comes to be understood as rational control, the power to objectify the body, world and passions, and to assume a disengaged and instrumental stance towards them. The notion of 'inner' representational knowledge and the view of a mechanistic external reality go hand in hand. Further, this new definition of reason brings about the internalization of moral sources and the new understanding of rational control. Along with the central idea of disengagement, this is Descartes' most important contribution to modern views of the self, and they assert a heavy influence on debates and approaches long after his particular and infamous version of dualism has been repeatedly discarded. We still turn inwards, not to meet God or the Good, but our own thoughts and self. For Descartes, as we see in the *Cogito*, this is indeed the first and ultimate undeniable truth –the foundation on which we might rebuild the order of representations.

First/Third Person Reflection; Locke and Montaigne

We have seen how the small beginnings of the paradoxical relation between the

⁷⁵ Though these words are of course not meant with the anti-realist connotations we often read into them.

third and first person perspective sprang from Augustine's notion of inwardness and the radical reflexive stance. Descartes takes it a step further by arguing that the ontological locus of secondary properties (i.e. colour) and bodily sensations (i.e. pain) is not in any sense located 'in' the bodies concerned, but only in the mind. Hence, in order to have a clear understanding of these things we need to disengage from them. This in turn involves our going outside of our first-person stance and taking on board some theory—or at least some assumption—concerning how things work in external reality. For Descartes and his followers, such theories and assumptions are mechanistic. But precisely here, a specific paradox arises – one which we might describe with reference to two other thinkers: Locke and Montaigne.

Locke pushes the notion of disengagement much further than Descartes, and argues that a mix of motivations brings it about: the search for control mingled with a certain conception of knowledge. The disengagement is turned towards the self as such, so that our striving for a third-person perspective removes us from our normal way of experiencing the world and ourselves. Following the Baconian model of science, Locke moves beyond Descartes in denying any form of doctrine of innate ideas. While this can be understood as an epistemological move, it also reveals Locke's profoundly anti-teleological view of human nature. Locke takes an atomistic and quasi-mechanical view of the mind. Further, he refuses to identify the person or the self with any substance whatsoever – be it material or immaterial. Instead, he locates personal identity in consciousness. This self-objectification, this ability to see even one's own thoughts from the 'outside' third-person perspective, makes the person entirely distinguishable from his or her body (as exemplified by his thought experiment involving a prince and a cobbler whose bodies wake up with the other's memories – most people would assume the two had exchanged bodies, not that their true personal identities had been altered). This detachment and subjectivist view of the self produces a picture of ourselves as pure independent consciousness, making it difficult to be conceived as 'merely' another piece of the natural, mechanical world. Yet, at the same time, as Taylor rightly puts it, this absolute detachment and observation of the human being from a completely third-person perspective is paradoxically premised

precisely on a radicalization of the first-person perspective. Hence subjectivity is at once expelled *and* provides the basis for that expulsion (Taylor 1989).

Similarly to Locke, Montaigne sees the person as located in consciousness, but with a very different starting point and motivation. Montaigne takes on a first-person rather than the 'objective' third-person stance, seeking for personal identity by turning inwards. His reflections on the human condition are not concerned with finding the objective, stable and unchanging human nature the way we find in Plato or Descartes. Rather, Montaigne turns inward only to discover an inner self that is unstable and ever-changing.

...there is no constant existence, neither of our being, nor of the objects. And we, and our judgement, and all mortal things else do incessantly rowle, turne, and pass away... We have no communication with being; for every humane nature is ever in the middle between being borne and dying; giving nothing of itself but an obscure appearance and shadow, and an uncertaine and weak opinion. And if perhaps you fix your thought to take its being; it would be even, as if one should go about to grasp the water. (As quoted by Taylor 1989, 179)

However, this constant flux does not lead Montaigne into relativism; he continues to seek equilibrium by identifying patterns and accepting the limitations of his human condition. Self-knowledge hence becomes a vehicle for self-acceptance. The ancient oracular demand to 'know thy self' has lost the meaning it carried for Plato and the ancient Greeks – that of finding the impersonal lore of human nature. It has turned into an individual quest where each of us has to discover our own individual form and being. Here lies another root of the current conception of inner space and self-reflection, especially akin to that found in modern psychology and counselling.

Now, even though Montaigne develops it in an entirely different direction than Locke does, this is still the individualism and inward turn that Descartes' theory requires; the thinker builds and orders thought by himself, beginning from the first-person singular. Obviously, Montaigne's novel way of approaching the (ever-changing) self from a first person perspective stands in stark contrast to the kind of third-person observations found in Locke and the self-exploration found in

Descartes, who both called for a radical disengagement from our ordinary experience. But Descartes' quest had been for an order of science, of clear knowledge in clear universal terms. Montaigne, by contrast—but again, not in opposition—attempted to bring out the uniqueness of human feeling and breaking out of the universals into pure particular individuality through deepening our awareness of it. Montaigne's legacy is that our search for identity or knowledge of the self is no longer adequately describable as a search for some universal description of human agency or the soul, but as a search for what *I* essentially am. We start thinking of ourselves as an inner self – even when we do not know what this might mean, or whether there is any stable thing that corresponds to such a notion.

The Completed Turn

Plato unprecedently treated the soul as the unifying feature of the human being; Plotinus, combining this view with Aristotelianism, identified the soul with the divine; Augustine retained the soul as an inward path to God, but distinguished between God and the soul seeing God. He thereby created a separate inner space in human nature. Descartes' disengagement and objectification of the inner self leading to radical reflexivity was only possible on the background of this initial turn inwards – here, the mind could retreat from the mechanistic external world, safe in its castle. The notion of disengagement and objectification was made even more extreme in Locke, and might be considered the first beginnings of an empirical approach to the study of human nature. With Montaigne, however, we find the emphasis on the uniqueness of the individual person. We see here the foundation for two important facets of the budding modern sense of self: self-responsible independence and recognized particularity. This became one driving force behind the Protestant reformation, where personal individual commitment joined with an 'inner' experience of faith became central in the new understandings of salvation. The ultimate purpose of the disengaged subject—conceived of as an independent and autonomous being—is to be discovered within, rather than through Platonic participation in the larger order of which s/he is a part. To know oneself is now, and inescapably so, a turn inwards to one's self in a radically reflexive first-person perspective.

A Recapitulation

From the first unsystematic and fragmented accounts in the ancient classical texts to the proliferation of theories found across disciplines in our own day, the views of and approaches to human nature have changed profoundly. This section has sought to trace the gradual unification of the soul, from Plato making it the locus of life, thought, moral good, and connection with ‘the Greater Good’, to the Augustinian use of metaphors describing the soul’s abilities, which resulted in invoking an internal space distinct from external reality. The synthesising of Christian theology and Greek philosophy to a large part allowed a view of the soul as immaterial and subsistent to flourish, yet again reiterating—and ‘sharpening’—the distinction between the soul and the material world. With the scientific ‘revolution’ the general understanding of reality as a whole was altered, but the sense of inwardness retained, albeit in new forms. Descartes constitutes a prime example—together with Hobbes, Locke, and Montaigne—of how the inner space of the soul was developed in light of the new forms of mechanistic materialism. While empirical understandings of the universe flourished, the metaphysical framework necessary to make sense of data arguably suffered. Aristotelian metaphysics were thrown out, and with it the soul’s status as a real feature of reality. As a result, the concepts of ‘self’ and ‘soul’ lost their earlier explanatory strength; the concept of ‘mind’ was pushed to the very fringes of reality, belonging only to the at once primary and excluded first-person perspective; the notion of ‘self’ was fragmented into various parts and bled out into its ever-changing surroundings, leaving it ontologically aporetic and at worst altogether insignificant and dismissible.

For all its merits and innovations, contemporary philosophy of mind is still shaped by a Cartesian heritage that hinders its movement. This framework underpins the debate through a conglomerate of ideas and assumptions that shape at once the questions and the conceivable solutions. These two chapters have sought to show how seeing the so-called body-mind problem in isolation is therefore insufficient. Awareness of historical contexts and shifts—and an appreciation of how the problem has mutated in tandem with shifting metaphysical views of reality as a whole—is vital to understanding what exactly the problem is (or rather appears to be), and to enable us to reconceive it along new avenues. The above historical

genealogies—which are but one way of uncovering unarticulated assumptions and hopefully enabling us to begin to think otherwise—have viewed the defining features of the Cartesian framework (the mechanical view of matter and causation, the notion of an inner space distinct from external reality, and the general understanding of what a substance is) as having emerged over time, through conscious or semi-conscious shifts, and suggest that the way of framing questions and solutions might very well have been otherwise. A different, yet complementary, way to throw light upon this is to compare these current (and historical) Cartesian features to other full-fledged metaphysical frameworks; either non-Western and so not much influenced by the historical circumstances surrounding the Western development, or historical Western pre-Cartesian ‘roads not taken’ due to historical circumstance. Based on the insights we might gain through such comparison, we can seek a framework that includes (to put it with the Hatter in *Alice in Wonderland*) a sense of reality’s ‘muchness’, yet without encountering the same problems. The next section considers two non-Cartesian frameworks—one non-Western and one pre-Cartesian—as starting points for such an exploration.

Part Three

Non-Cartesian Metaphysics:

Buddhist and Thomistic Alternatives

In Search for Something ‘New’

The mind/body problem can not be solved within the Cartesian framework; it remains riddled with conceptual confusion. The historical genealogy of core concepts of the debate has shown the roots of some of the confusion, with the intention of highlighting that the current implicit understandings and commitments need not be what they are, but rather are particular to a modern Western view of reality. This section continues this line of argument by examining two non-Cartesian metaphysical frameworks—namely Thomistic and Buddhist metaphysics—and contrasting their view of reality and human nature to the views found in the Cartesian framework.

Western metaphysics has from its early beginnings attempted to rationally describe a comprehensive picture of the world; the defining features of reality; its ultimately existing parts; and what it is that distinguishes them and makes them possible. This is the question of being – ‘what is the nature of being?’ This differs from the detailed account of what is in the world or its categories – ontology, which is an attempt to answer, ‘what are the beings?’ The aim of this part is to uncover from another perspective that the way reality is conceived of in the modern West is not necessarily universally true. Pre-Cartesian and Non-Cartesian frameworks might thus provide mirrors to hold up to the Cartesian Framework, allowing us to see in which areas it falls short; reality might be perceived in other ways; other questions might be asked. However, looking at these two alternative has a second function too – namely providing potential inspiration for a rethinking and reimagining of the metaphysical framework of contemporary philosophy of mind, and by extension therapeutic practice.

Ancient philosophies are yet again being brought out, dusted off, re-evaluated and increasingly found to be sophisticated, weighty and relevant. There are of course

several other metaphysical concepts and frameworks that might lend themselves to such a comparative study, such as the Japanese concept of ‘the oneness of body-mind’ (*shinshin ichinyo*),⁷⁶ or the ancient Hebrew concepts of ‘living-being’ (*nephesh*) and ‘life-giving spirit’ (*ruach*)⁷⁷, not to mention the various strands of Hinduism, or even Aristotle. In some ways, the choice of Buddhist and Thomistic metaphysics as a source of new (or rediscovered) ways of approaching the mind/body problem and issues concerning human nature is a response to the growing popularity of precisely these philosophies in many fields concerned with these issues; especially in psychology, sociology, consciousness studies, and theology, and even physics, biology and economics.⁷⁸ However, in their reappropriation, few attempts are made to spell out (however briefly) these two distinctly different frameworks in their entirety.⁷⁹ Unfortunately, this can only lead to confusion; either writing them off as antiquated and irrelevant—which they are not—or glossing over problems that occur within their own respective systems. By contrast, this thesis seeks to recognize the need to consider the frameworks holistically, since both the Thomistic and Buddhist frameworks respectively are complete descriptions of reality that need to be approached as a whole in order to respectfully attempt to understand their view of reality and human nature. Further, they are often applied without taking into account the full metaphysical implications of such a stance or without any rigorous consideration of why they might solve the problems and what the root causes of the problems might be. Thus, these chapters are also an attempt to rectify this by bringing into dialogue metaphysical frameworks that seldom meet. In a sense, then, the following is a three-way conversation between the Cartesian framework, Aquinas and Buddhism in an attempt to articulate what is wrong in the current predicament of (Western, Cartesian) philosophy of mind, and how we got here. The hope is that through such

⁷⁶ ‘A phrase used in Japanese theatrical arts, such as *Nô* theatre, and martial arts like *Jûdô* and *Kendô*. The oneness of body-mind is thus a goal or ‘an ideal for inward meditation as well as for outward activities’. Yasuo, Y. (1987, 24) in T. P. Kasulis, Ed., & T. P. Nagatomo Shigenori, Trans.

⁷⁷ These two concepts are found throughout the Tanakh and also in the writing of St. Paul and they express the Hebrew notion of man as a material-spiritual psychophysical unity. Hulme (2007, 82-92) in C. Pasternak (Ed.).

⁷⁸ For some examples of the resurgence of Aquinas in various arenas see John Finnis (1998), Andrew Pinsent (2012), and John Milbank (2001a; 2001b).

⁷⁹ Often they are alluded to in the final chapters of books as inspiration or answers, but with no spelling out of why and how that might be. For example, Noble (2006), Blackmore (2003), and Donaldsen (1992).

dialogue we can be encouraged to see reality in new ways.

An endeavour such as this must, however, beware of several stumbling blocks. If we are to understand and appropriate the Buddhist and Thomistic ideas of human nature and the intellect we cannot jump straight in, and there are at least three theoretical reasons for this. First, there is the language barrier. English words used to translate Latin and Sanskrit concepts are often common terms in contemporary philosophy, but their meaning is invariably not identical, the concepts of ‘matter’ or ‘soul’ being prime examples of such instances. Secondly, in order to understand things we cannot grasp we tend to map them on to what we know or have more understanding of. However, the truth is that so much in contemporary metaphysics is not clear and has such a distinctly different foundation to medieval or Buddhist metaphysics that this ordinarily helpful way of interpreting and understanding historical philosophical positions is not readily available. Thirdly, Buddhist and Thomistic metaphysics are, respectively, very much complete wholes. Trying to dissect only one small section—be it the view of human nature, epistemology or ethics—leaves many loose threads, opportunities for misunderstanding, and seeming inconsistencies. Hence, this part attempts, within the constraints of the project, to give sufficient understanding of the frameworks as a whole, rather than just considering the mind/body relationship in the respective views.⁸⁰

Further, there are of course—due to the time in which Thomistic and Buddhist thought was articulated—aspects of their thinking and writing that obviously are no longer empirically sound. However, this does not mean that they are completely archaic and irrelevant. There are three main points I want to raise in this regard. First, even though there might be elements of these metaphysical frameworks—such as the notion of rebirth or eternal life, the existence of one God, multiple gods, and spiritual beings—that might seem unscientific to us, this does not mean they don’t have any helpful contribution at all to make. For example, in the instance of the doctrine of two truths: while it is true that Buddhism ultimately says all there

⁸⁰ The previous chapters have also shown that the issue needs to be considered in a larger context.

is, is emptiness, and conventional reality is a mere illusion, the way it analyses conventional reality, matter and human persons in terms of *dhamma* and dependent origination still has features that are useful and challenging to the current debate. Secondly, it is important to consider that neither Buddhist nor Thomistic metaphysics set out to give an empirical account of human nature as such; rather they are providing us with a metaphysical and ontological account. While this of course does interact with the empirical and experience, the out-of-date science they appropriate their framework to or use as examples to make their points does not make their metaphysics and ontology fundamentally flawed. It is our responsibility to re-appropriate and translate their metaphysics and ontology to what we now know from the sciences.⁸¹ Finally, while there has been a lot of progress in the sciences, it is not given how these new sets of data should be understood. Currently the data is mostly understood in light of the Cartesian framework, where reductive physicalism is the given playing field. This, as argued above, has given rise to an array of problems. Therefore it is not valid to dismiss a metaphysical framework for its apparent failure to fit with science. It is a legitimate option to consider how the data could be understood if one took a different metaphysical stance. Buddhist and Thomistic metaphysics provide precisely such alternative perspectives.

Finally, some readers might react skeptically to what they consider an unwelcome introduction of 'religion' into philosophical arguments. This reaction is often due to the fact that these pre-Cartesian and non-Western frameworks are viewed as strangers when introduced into a Western academic discourse that pre-supposes an explanatory 'gap' in need of 'bridging' (a problem exemplified by the arguments surrounding Non-reductional Physicalism). Further, these misunderstandings often come from a failure to fully understand the philosophical concepts on their own terms and in the context in which they occur. For instance, the Thomistic notion of a substance as form/matter is alien and misconceived if one at the same time insists on the Cartesian understanding of matter. Likewise, the concept of the soul often bears immaterial connotations often connected to an afterlife of sorts,

⁸¹ Bearing in mind that science itself is not done in a metaphysical void.

but as shown in the above genealogical chapters, this has not always been the case. It is therefore important to stress that this should not necessarily be seen as an advocating of ‘religious’ worldviews as opposed to a ‘neutral’ philosophical one (if there is indeed such a thing). As Eleonore Stump and Norman Kretzman point out when addressing this issue in their Handbook on Aquinas:

...philosophy has been noticeably affected by one or another influence during most of its history. For instance, from the middle of the nineteenth century until present, the dominant influences on philosophy seem to have included first biology and geology, then physics and mathematics, and now perhaps, a combination of physics, neurophysiology and computer science (Stump and Kretzman 2001, 7).

Rather than viewing these as religious doctrines that must be accepted before use (or even viewing them as compatible to each other by virtue of being ‘religious’), we should attempt to consider them philosophical conceptual frameworks or models that might be useful (or not) in re-framing the questions ‘from outside’, and help us become aware of certain ‘blind-spots’ inherent in the Cartesian framework. If done with earnest openness and willingness to take on a different viewpoint, the soteriological narratives obviously present and influential in the two, do not have to be stumbling blocks. Rather the fact that their view of reality as transcendent and life as having an end goal, provides a richer narrative than the one found in the disenchanted world of the Cartesian framework. An understanding of reality that can help us to a greater extent navigate the complex issues of health and wellbeing and set goals for therapeutic practices.

This part on Non-Cartesian metaphysics has three chapters. The first of these, chapter four, deals with the Thomistic framework, chapter five with a Buddhist framework, and chapter six provides a comparison and appraisal of the two. While Buddhism and Aquinas do not map onto each other, this thesis keeps the structure of those two chapters as similar as possible for the sake of clarity. Both chapters start with setting a context for the framework, as this is important if we are to have a nuanced understanding of the ideas and concepts that emerge. Then they go on to look at the metaphysical constructs—how reality, matter and causation is understood in the respective frameworks—and the final portion of the chapters considers their views of human nature and understanding of the mind. The

subsections within the three sections of the chapters deal with features specific to Aquinas and Buddhism respectively. The final chapter in this part, chapter six, uses the same structure. It starts with the metaphysical framework comparing the understandings of reality, matter and causation, followed by an appraisal of their view of human nature. This section concludes with a brief summary drawing out the important features of the two non-Cartesian frameworks that highlight the shortcomings in the Cartesian framework and how, in light of the two alternative frameworks, reality might be perceived in other ways.⁸²

⁸² I am grateful to Dominic Corrywright and Dr. John Peacock for looking over the various aspects of Buddhist metaphysics for me.

4. Thomas Aquinas: Tried and tested?

When I was seven years old my grandfather gave me an illustrated introduction to Western philosophers. Each philosopher was drawn surrounded by different objects signalling both their views of reality and their lives. There are two entries in the book that I still remember; one being the page about Descartes, the second being the page about Aquinas. He was depicted in his monk's habit and with a shaven head sitting absentmindedly at a table, eating. The table had a semi-circle cut into it in order to accommodate his ample middle. He struck me as old and odd.

To the modern reader, Aquinas' language and writing style might seem obscure and difficult to understand. To his contemporaries, however, he would have been articulating his thoughts in a manner that was very clear. The literary structure he employs is the 'scholastic method', the hallmark of his time. It is a method of question, answer and objection thematically organised which originated in classroom debates. His *Summa Theologica*, for example, was written as a manual for beginning theology students introducing all the important topics of theology at the time. Further, modern readers might react negatively to his talk about the soul, form, matter, phantasms, and immaterial beings such as angels or God. The question of God, for instance, might at first glance seem obscure and irrelevant, not to say downright anti-intellectual and anti-scientific. However, during the Middle Ages, as Anthony Kenny and Jan Pinborg note,

[t]he most advanced scholarly research in philosophy...was made by students or teachers in the faculty of Theology (especially in the thirteenth and fourteenth centuries)...That is why so much of study of medieval philosophy is concerned with theological texts. But this historical connection does not entail that philosophy and theology could not be studied separately, or that theological goals determined philosophy and made it unfree and unphilosophical. There are large sections of pure philosophy in theological texts, often to the extent that theological authorities thought it necessary to intercede and demand a stricter limitation to theological problems (Kenny and Pinborg 1988, 15)⁸³

⁸³ That being said, due to the limited scope of this particular project, the issues concerning God, angels and the subsistence of the soul will be set aside, and mentioned only when needed to move

This chapter gives an overview of Thomistic metaphysics and theory of human nature. The first section sketches the historical and philosophical contexts in which Aquinas worked and wrote. Section two turns to Thomistic metaphysics and its description of reality. The starting point here is Aquinas' understanding of reality in light of the notion of being and essence, as well as his understanding of act and potentiality. This will also briefly consider the idea of participation, since this is one of the ideas distinguishing Aquinas' philosophy from that of Aristotle. The third section highlights three areas of Thomistic metaphysics that are of particular interest to the present thesis and for a comparison with a Cartesian framework: the view of matter, causation and human nature (including mind and consciousness). As we will see, Aquinas understands corporeal reality in terms of form and matter. This is what constitutes all substances. The notion of substances is dovetailed by his understanding of causation, together providing an account as to how something can be a distinct thing and yet be constantly subject to change. Following these basic descriptions of the corporeal world is a fourth section; Aquinas's view of human nature will be examined. A human being—like anything else part of corporeal reality—is cast as a particular instance of form and matter; human beings as essentially embodied creatures, with bodies of a particular sort. Thus, Aquinas attempts to make sense of human nature in a larger metaphysical framework. No need to say that such an important thinker has spurred a host of debates about the possible perspectives on and implications of his work. Therefore the chapter takes a largely general explication of his metaphysics, based on (among others) the work of Eleonore Stump and Norman Kretzman (1988; 2003; 1993; 2001), Robert Pasnau (1997; 2002; 2003), William Norris Clarke (1993; 2001; 1993; 2009), Anthony Kenny (1994; 1980; 2005b), Gilles Emery (2003; 2010; 2011) and Edmund Feser (2009).⁸⁴

forward in the line of thought.

⁸⁴ List of Abbreviations used for Aquinas' texts: *CT* – *Compendium theologiae*, *DEE* – *De ente et essentiali*, *DPN* – *De principiis naturae*, *In Meta* – *Sententia super Metaphysicam*, *In Sent* – *Scriptum super libros Sententiarum*, *QDV* – *Quaestiones disputatae de veritate*, *SCG* – *Summa contra gentiles*, and *ST* – *Summa theologiae*.

4.1. Context

Most of Aquinas's writings are a product of his years as a teacher in the Dominican Order of Preachers, and as a member of the theology faculty at the University of Paris. While most of his writing is theological of nature, it should be noted that academic theology in the Middle Ages was not limited to questions about the nature of God, but was approached as a rational investigation into the structure of all of reality and human nature and behaviour – in other words, much that now would be called philosophy. For Aquinas, the discipline of metaphysics is concerned with the science of being. That is, his philosophy starts with and develops from metaphysics. Aquinas argues that God is the only being whose essence is existent, and that hence all being depends on God. In his most systematic works, *Summa Contra Gentiles* and *Summa Theologica*, Aquinas begins his philosophical speculation with an inquiry—he sets things in motion by inquiring into God-in-himself—what it means for God to be God. Yet, while his work begins from, and is clearly motivated by what can be described as theological, 'what he produces in acting on that motivation is thoroughly, interestingly philosophical' (Stump and Kretzman 2001, 9). Aquinas' work also bears an obvious philosophical connection with Aristotle, on whose philosophy he wrote extensive commentaries. Hence, Aquinas draws on Aristotle in defending his own viewpoints and seeks to synthesise these with his understanding of the Christian scriptures. As a result, fundamental concepts in Aquinas' metaphysics—such as potentiality and actuality, matter and form, substance, essence, accident and the four causes—all have an Aristotelian pedigree. However, the many *prima face* similarities between Aquinas's work and Aristotle should not be taken to suggest that Aquinas' thought could somehow be reduced to Aristotle. For one thing, there are too many differences in their respective historical, cultural and religious circumstances. It is these differences that give Aquinas's use of Aristotelian concepts a distinctly different flavour. Aquinas' starting point of a Trinitarian God as 'the foundation of the nature and existence of everything' (Stump 2003, 13) provided him with a radically new way of understanding the Aristotelian concept of actuality and 'primary cause' – one simply unavailable to the ancient Greek thinker. As Joseph Owens points out 'the philosophical phrasing employed by the two thinkers may to a large extent be the same, but the meanings

attached to the same expressions can be very different in each of them' (Owens 2001, 40). This is particularly obvious in (but not limited to) Aquinas' understanding of being and essence—'the real distinction'—which is crucial for Thomism, but thoroughly un-Aristotelian. While writing a commentary on the pseudo-Dionysian treatise *De divinis Nominibus*, Aquinas furthermore made Platonism an important ingredient of his philosophy – in particular the notion of participation. In short, Aquinas was a great synthesist. His respect for commentators on Aristotle among Islamic and Jewish philosopher-theologians—such as Avicenna and Maimonides—gives his work a depth and breadth that makes it stand out against the background of his contemporary colleagues.⁸⁵ His most important areas of contribution include metaphysics; philosophy of mind; theory of knowledge; will and action; ethics, law and politics; and theology (natural, revealed and philosophical).

4.2. Metaphysics

It is impossible to approach any aspect of Aquinas' philosophy without taking into account his metaphysics. To understand Aquinas' ideas concerning the mind and cognition, one needs to grasp his theory of the soul; and it is difficult, if not impossible, to understand Aquinas's claims about the soul and its relation to the body without situating these in Aquinas's view of being and substances at large, and his theory of form and matter in particular. When unpacking these aspects of Aquinas' thought, one needs to understand the foundational elements of his metaphysics such as 'act' and 'potency', and 'essence' and 'existence' and his four notions of causation. At the same time, one has to bear in mind that Aquinas considers metaphysics to be the science of being *qua* being, and that since he argues that being itself is first of all God himself and hence that all being depends on God, he extends his metaphysics beyond the foundation of the Aristotelians he draws upon. This means that Aquinas's view of reality is more than just the corporeal world: God is the fundamental reality, followed by the created order of Angels, human beings, animals, plants, and matter. In this chain of being, human beings have a special mode of existence—straddling as we do both the corporeal and the incorporeal world—our bodies place us in the corporeal world, while our

⁸⁵ For more see Eleonore Stump's introduction (2003, 11–32).

rational souls extend our being into the incorporeal world. And yet—importantly, as we will see—in Aquinas’ scheme, body and soul form one substance; both components *together* make for one human being. This view of Aquinas’ metaphysics as a rich tapestry where everything hangs together in particular ways should be kept in mind as selected aspects of it are emphasised in the following. Obviously, one cannot do justice to Aquinas’ metaphysics in its entirety, nor even his view of human nature, in one single book. The following will focus on the particular points where it becomes clear that Aquinas is relevant for the issues facing philosophy of mind today: his understanding of reality, matter and causation.

Reality

Aquinas’ view of reality builds on Aristotle’s basic ontology. There is only one reality; things that inhabit this reality have different modes of being. For Aquinas, metaphysics has as its subject being *qua* being.⁸⁶ Being is a complete encompassing concept. It is the highest kind of study, since it takes as its ‘object’ all that exists. In his own words, ‘nothing can be added to being as though it were something not included in being—in the way that a difference is added to a genus or an accident to a subject—for every reality is essentially a being’ (*QDV* 1.1). It should be noted how this means that being is not a genus (e.g. animal) divided into species (e.g. feline), since nothing lies outside of being or can be defined as non-being. Everything that exists can be placed into these modes or categories; to inhabit reality is to be in a mode of being. Instead, being is divided into *infinite*—that which is uncreated (God or the first cause)—and *finite* – that which is created and receives its being from the first cause. The finite and created part of reality is further divided into the *potential* and the *actual*. The potential is latent in actual being, but is not yet brought into actuality. Actuality is that which is presently in a state of act, and is also described in terms of the so-called ten categories of being: *substances*, which are composites of form and matter taking up room in space and time such as elements, plants, animals and human beings (Aquinas—following Aristotle—views substances as the ontological referent of being through analogy);

⁸⁶ For more on Aquinas’ account as to how we arrive at knowledge of being as real or as existing see Wippel (2000, chap. 1 and 2).

quantity, relation, quality, place, time, position, state, action, and affection. As we will see, these categories are important to Aquinas' account of substance-accident composition and change.⁸⁷

For Aquinas, then, reality itself is by definition 'actual', and it impresses its forms upon human cognition.⁸⁸ Thus, for Aquinas (and Aristotle) 'the awareness is directly of the thing itself, and only concomitantly and reflexively of the percipient and of the cognitive act. The external thing remains epistemologically prior' (Owens 2001, 53). Anything we can experience and perceive in the present moment is actual; and all that we experience in our perception is known as being and as a particular substance, be it a metal, plant, animal or human person. Accidental properties such as colour, size and relation inhere in the substance. Things that lie in the future exist only potentially and need something in a state of act to bring them into being through efficient causality. If the substance undergoes change, it exists temporally and a composite of matter changing form one form to another.

Since the above mentions 'substances', it might be worthwhile opening this discussion with a small caveat on the Cartesian notion of this term. As we have seen, for Descartes, a substance as extended in time and space is isolated and

⁸⁷ In addition to these ten categories of being, Aquinas holds that immaterial substances also are in act, but that they do not inhere in matter, as for instance in the case of angels. This third category is of no real relevance to the present argument other than noting that it differs fundamentally from Descartes' view of reality as made up of two substances, the material and the immaterial, the view of reality in the Cartesian framework as being merely substances extended in time and space, and—as we shall see—Buddhism and its conception of two realities – conventional and ultimate reality.

⁸⁸ This is fundamentally different from modern philosophers, who in the wake of Descartes construct their philosophy from sensations rather than the things themselves. Also, it contrasts to many of the postmodern philosophers who start from linguistic and historic formation. In a way, then, Aristotle and Aquinas manage to take seriously the pervasive experience and awareness of ordinary people that the world outside one's mind is immediately and directly known. Also it stands in stark contrast to the notion of existence Gottlob Frege introduced into modern logic: that is, existence as a predicate of concepts (a second-level predicate) and not a predicate of objects (a first-level predicate). To say 'roses exist' seems to mean that a certain type of objects exist, namely roses. However, on Frege's view, existence is predicated of the concept being a rose. In other words, there is one instance of a kind that falls under a particular concept, namely 'rose'. Therefore, the sentence does not say anything about particular roses, but instead something about the concept of being a rose. If one is to insist upon understanding existence in Fregean terms, then, one fails to consider that the notion of 'existence' might be understood analogously rather than univocally. While post-Fregean philosophers might disagree with Aquinas, this does not imply that Aquinas is wrong or mistaken and of no consequence for today's debate. It simply means that Aquinas's fundamental assumptions in regards to reality are different.

unrelated; 'that which needs nothing but itself (and God) to exist.' Locke, likewise, sees substance as something static, unknowable in itself, but nonetheless a foundation for accidental properties. Hume, sees substance as separable from all its accidental properties, consequently making it empirically unobservable. This Cartesian way of understanding being and substance has lead many contemporary thinkers to 'reject substance entirely as a nonviable mode of being' (W. Norris Clarke 1993, 608). The Thomistic use of the term substance is however very different from this. The difference stems from a notion that underpins Aquinas' work throughout; namely his notion of being as 'actually existing, as intrinsically active and self-communicating'(Clarke 1993, 603). As Clarke explains the Thomistic notion of being as intrinsically active:

[t]o be and to be active, though logically distinct, are inseparable. 'Communication', as Aquinas says, 'follows upon the very intelligibility of actuality'. The full meaning of 'to be' is not just 'to be present', but 'to be actively present'. Existence is power-full, energy-filled presence. (W. Norris Clarke 1993, 606).

Following from this constant overflowing into self-communicating action, another basic aspect of 'every real being, inseparable from its substantiality, just as action is from existence', is *relationality* (Clarke 1993, 607). As Aquinas's view of reality is imbued with telos and the idea that 'every substance exists for the sake of its operations'⁸⁹. Therefore, being as substances is *also* being as relational; to be is to be substance-in-relation (Clarke 1993). For Aquinas, then, reality has two modes – *substantiality* and *relationality*. In contrast to the Cartesian framework, the Thomistic framework sees being as a dynamic interaction between substance and relation/action.

Particular features of Aquinas' understanding of reality sets him apart from Aristotle. Especially important in this respect are his notions of the analogy of being and of participation.⁹⁰ In stating that being is analogical, Aquinas places the

⁸⁹ 'Every substance exists for the sake of its operations.' *ST*, I, q.105, art. 5. 'Each and every thing shows forth that it exists for the sake of its operation; indeed, operation is the ultimate perfection of each thing.' *SCG*, III, ch. 113

⁹⁰ The importance of these is noted by John F. Wippel: 'The first addresses itself to the unity and the diversity involved in our understanding and predication of "being", and the second is concerned with the ontological situation that gives rise to such unity and diversity – that it unity and diversity in

term as if 'in between' its *equivocal* and its *univocal* usage. Being is on the one hand not an *equivocal* term, that is, a term open to more than one interpretation, as for instance the term 'table'.⁹¹ This is because even the vast range of different things we use it about share precisely the fact that they are being. But neither is it a univocal term, since the way we apply it does not denote one precise meaning; the 'being' of a stone, an animal and a person is undeniable very different. The notion of analogy holds together the paradox of something being the same yet different. For example, accidents and substances both have being, but accidents lack the kind of independent being that substances have. This notion of analogical being goes all the way down and all the way up, so to speak; 'the being of an accident is *analogical* to that of a substance, that of a material thing is *analogous* to that of an angel, and that of a created thing is *analogous* to that of God; that is to say, it is neither completely identical nor absolutely incomparable' (Feser 2009, 33). This notion of being is a way of understanding reality as a whole as sharing a notion of being and yet at the same time allowing for distinction and diversity.

Aquinas' notion of participation similarly provides such an intimate relation throughout all of reality. Here, the central idea is that, apart from God, there is no being that is self-existent. Being as such is ultimately the nature of God; this is the first instance of being. All else has to 'receive it [existence] as an actuality that comes from the outside from an efficient cause' (Owens 1993, 48). In Aristotle it is the form that makes a thing actual. For Aquinas, however, it is this 'received' existence that makes the form/matter composite actual. God, as the only being where essence and existence is identical, is the primary cause of everything that exists. Basically 'being is bestowed by God as the primary efficient cause, through creation, conservation and concurrence in the activity of every creature...This bestowal of existence by God extends to the smallest detail' (Owens 1993, 46). This further implies that a creature's nature will be separate from a creature's being. A creature's nature cannot produce being, as without existence there would be no

reality. Aquinas's theory of participation also lies at the heart of his answer to the problem of the One and the Many in the order of reality. Simply stated, how can there be many things, each of which shares in being, and yet each which is different from every other?' (Wippel 2001, 93).

⁹¹ Which could be understood either as dining table or a table of data.

creature to bring it into act. This is a major development of the Aristotelian conception of efficient causality. As Owens puts it, Aquinas maintains ‘the Aristotelian form as cause of being, but only under the activity of an efficient cause. It makes efficient cause antecedent to all finite form...Efficient causality now bears upon the whole of the finite thing and extends to the production of both matter and form through a creative act – the bringing of something into existence rather than the initiating motion’(Owens 1993, 47).

In Thomistic metaphysics, being is a *transcendental*, that is, it is something common to all, and above categories. Other *transcendentals* in Aquinas’ matrix—such as *one*, *true* and *good*—are all interchangeable with being, designating different aspects of it. ‘One’ indicates that being can be one thing, distinct from other instances of being or non-being.⁹² Being is in other words not a flux, but rather particular instances of being standing in interdependent relation to each other. The notion of ‘true’ as a transcendental has not to do with beliefs or propositions – Aquinas uses the term in the sense of ‘real’ or ‘genuine’. As defined by Feser; ‘a thing is true to the extent that it conforms to the ideal defined by the essence of the kind it belongs to’(2009, 33). For instance, a circle drawn with a drafting compass is a ‘truer’ instance of a circle than a toddler’s doodle of a circle. But importantly, our intellect can still grasp the toddler’s doodle as an attempt at a circle. In this way, as Aquinas puts it, ‘the word “true” ... expresses the conformity of a being to intellect’ (*QDV* 1.1.). Finally, ‘good’ is an instance of being for a similar reason – goodness, in classical philosophy, is seen as the ‘conformity to the ideal represented by a thing’s nature or essence’ (Feser 2009, 34). As a mother, of course, one will understand the toddler’s circles to be good and perfect—she is so adorable for trying—but philosophically speaking, a poorly drawn circle is a *bad* one and an accurate circle is a *good* one. A thing is therefore *good* in the same manner as it is *true* – that is, to the extent that it is an instance of, exists as or has being as an instance of its kind. As Aquinas says, ‘everything is perfect so far as it is actual. Therefore it is clear that a thing is perfect so far as it exists; for it is existence that makes all things actual’ (*ST I*, q.5, art.1). In the same passage

⁹² This is very different from the notion of ‘one’ found in the Buddhist description of reality, where it means ‘all is one’ and where any type of distinction is ultimately illusory.

Aquinas notes further that the essence of goodness is that it is in some way desirable; 'it is clear that goodness and being are the same really. But goodness presents the aspect of desirableness⁹³, which being does not present' (*ST I*, q.5, art. 1).⁹⁴ The idea of the good then imbues all of reality, as a necessary metaphysical truth, because 'a thing's good is what it is *by its nature* directed towards as its final cause... [and borrowing from Aristotle] Aquinas says; 'goodness is that which all things desire' (*ST I*, q.5, art.4) (Feser 2009, 35).

For Aquinas, a mathematical understanding of the essence of a circle does not need to include the circle's material configuration; it is indeed possible to know a thing's essence without knowing whether or not the thing or creature exists; 'every essence or quiddity can be understood without its act of existing being understood. I can understand what a man or a phoenix is, and yet not know whether or not it exists in the nature of things' (*DEE 4*). However, Aquinas does not take the Platonic view that the forms of things exist in a separate realm of ideas (one might say that Aquinas is a 'moderate' realist about universals). He explicitly states that the form alone cannot constitute a thing's essence, 'otherwise there would be no difference between definitions in physics and in mathematics' (*DEE 2*). In regards to material reality, he states, 'the term "essence" signifies the composite of matter and form' (*DEE 2*). In the natural world, then, the fact that things are material and corporeal are part of their essence. Again, it is Aquinas' real distinction—his distinction between essence and existence—that comes into play. If essence and existence were identical (which they are in God, thus making God dependent on nothing else for his own existence and hence a necessary being), then in the case of material objects, there could be no more than one member of each kind.

In this way, the Thomistic development of Aristotle has implications for the understanding of how 'the same thing can exist both in reality and in one's cognition, and thereby of how the thing existing outside of cognition is the same thing that is known' (Owens 1993, 51). In short, the developments of the

⁹³ Desire is here understood in the context of *telos* or 'final' cause, not our wavering urges.

⁹⁴ The notion of 'good' as a feature of being permeating all of reality, and a direction of *telos* stands in contrast to one of the three characteristics of reality in Buddhism, namely suffering/unsatisfactoriness (*Dukkha*).

Aristotelian metaphysics Aquinas otherwise utilizes are made possible through the distinction he makes between *essence* and *existence*. On the Thomistic view, *essence*—sometimes referred to as a thing’s ‘nature,’ ‘quiddity,’ or ‘form’⁹⁵—is ‘that through which something is a certain kind of being’ (*DEE* 1). Put more crudely, *essence* gives reality defining features for the knowing intellect to grasp onto, thus allowing for cognition (a complex process which will be elaborated in a later section).⁹⁶ In other words, essence makes a thing what it is and makes it capable of being known, or grasped intellectually, as that thing. In this sense, essences are somewhat akin to universals. The essence is what is shared by things of the same kind. As Feser puts it, for instance, all humans share the same essence: ‘...humanity constitutes a natural kind or species, namely the one traditionally falling under the genus *animal* and its differentiated from other species in that genus by virtue of its members being *rational*’ (Feser 2009, 26). *Humanity* understood in this fashion exists only as a concept. But compared to the Lockean understanding of concepts found in the Cartesian framework (or in some ways, as we shall see, in Buddhism), Aquinas does not see humanity *as species* as merely conventional or as a convenient linguistic designator. Even though universals like *humanity* exist only in the intellect, they are in some sense real; ‘such conceptions have an immediate basis in reality’ (*In Sent* 2.1.3). Outside of the mind, only particulars exist; i.e. there is no humanity walking around on the pavement, only particular instances of human beings. The essence of a thing is only graspable in the mind, the nature of a thing is in the thing (Feser 2009, 24–26). Thus, the material corporeal world has a quite different ontological status in Aquinas account of reality than the term ‘material’ does in the Cartesian framework. The next section will examine more closely what the various aspects of being— act and potency, form and matter, essence and existence, substance and accidents—mean in the Thomistic account of the material world.

⁹⁵ It is worth noting that ‘form’ is occasionally applied in a narrower sense referring only to a part of a thing’s essence.

⁹⁶ As will become clear in the following chapter, this stands in contrast to the Buddhist notion of no-self. On the Buddhist view, reality has no essences; our experience of substances is merely cognitive projection and convenient linguistic designators applied to fleeting configurations of *dhammas*.

The Material

In the Cartesian framework underpinning much of the contemporary debate, matter is taken as essentially and even exhaustively describable in the mathematical quantifiable terms of modern physics. Material objects are self-existent, and only related to one another by way of a specific notion of efficient cause. This is a mechanistic view of matter. The early modern philosophers and scientists who put forward a ‘mechanistic’ conception of matter tended towards the view that colours, tastes, smells, sounds and the like as we subjectively experience them cannot be real features of the world because they are qualitative rather than quantitative (Feser 2009, 38–40). Hence, for scientific purposes, colour and the like as objective physical properties were redefined in entirely quantifiable terms and the residual elements of these properties that could not be captured in such a way defined as existing only in the mind, as subjective sensory qualities we project onto the objective world. On this view, since they are not objective, mental properties can only count as ‘non-physical’, making them an oddity in a mechanistic-cum-material world. This view of matter—one still prevalent—hence requires the kind of dualism that characterizes the Cartesian framework.

By comparison, Aquinas (building on Aristotle) has a strikingly different framework, particularly due to his development of the idea of participation and his view of teleology. Substances are here conceived in the Aristotelian terms of form and matter, as being in a state of actuality and with inherent potentialities. Adding to this his notion of being, Aquinas puts his own flavour to the Aristotelian foundation, creating room for a much richer understanding of matter. Aquinas draws a distinction between the corporeal and incorporeal substances in reality. As he explains in the first chapter of *Being and Essence*, simple substances are incorporeal – God is the first of these. Corporeal substances, on the other hand, are composite substances.⁹⁷

⁹⁷ This, as will become clear, is not to be confused with a Cartesian nor Platonic dualist notion of composite of material/immaterial being. For simplicity’s sake, and because it is what is most relevant for contemporary philosophy, this thesis will be approaching his metaphysics from Aquinas’ view of material things.

Substances

The corporeal world is made up of material things, or in Aquinas' terms, substances. A substance can be defined as 'that which exists in its own right: it is a discrete thing in the world' (Eardely 2010, 28). A rose, for example, is a substance. Its redness, however, is an accidental property of the rose. That is, its redness does not exist in its own right, but is a property of the rose – a property which might have been different. It is accidental because the rose could change colour without losing its form as rose – even if colour is always inherent in a particular object. A substance, then—like the rose—is something which has come to be as a result of change and which undergoes change. Furthermore, while a substance is numerically one, all corporeal substances are composites of form and matter. Even our lowest-level material component, as proposed by our best physics, Aquinas still sees as matter configured in a certain way. This ever-changing smallest particle of material reality he calls an element. Generally speaking, a substance's matter is the material of which the substance is composed, while the form is the arrangement of the matter. A substance's matter makes it a particular individual, while the form makes it the kind of thing it is. The following quote suggests why this point is of utmost importance:

In composite substances we find form and matter, as in man there are soul and body. We cannot say, however, that either of these is the essence of the thing. That matter alone is not the essence of the thing is clear, for it is through its essence that a thing is knowable and is placed in a species or genus. But matter is not a principle of cognition; nor is anything determined to a genus or species according to its matter but rather according to what something is in act. Nor is form alone the essence of a composite thing, however much certain people may try to assert this. From what has been said, it is clear that the essence is that which is signified by the definition of the thing. The definition of a natural substance, however, contains not only form but also matter; otherwise, the natural definition of things and mathematical ones would not differ. Nor can it be said that matter is placed in the definition of a natural substance as something added to the essence or as some being beyond essence of the thing, for the type of definition is more proper to accidents, which do not have a perfect essence and which include in their definitions a subject beyond their own genus. Therefore, the essence clearly comprises both matter and form. (Aquinas, DEE 2)

The main point of interest here—crucial for its difference from the Cartesian framework—is that neither matter nor form can by themselves be the essence of a

thing or what makes that thing what it is. Neither of the two—when it comes to corporeal things—counts as a substance in their own right. Form and matter—or as in Aquinas’ example, soul and body—are not two separate substances the way we find with Descartes, but rather make up one single substance. Any thing, substance, or creature in the corporeal world counts as *one* entity of form/matter.

But while form and matter are numerically one, they do have different aspects to them. According to Aquinas, a macro-level substance is matter organized or configured in a particular way, and this configuration is dynamic rather than static. That is, as Stump articulates it, ‘the organization of the matter includes causal relations among the material components of the thing as well as such static features as shape and size’(2003, 36). For Aquinas, then, the term ‘form’ denotes this dynamic configuration. A thing’s configuration/form determines its properties, including its causal powers, its operations and its functions; these all derive from its form.⁹⁸ Put another way, the form is the inner principle that makes a thing be what it is: ‘the essence of any given thing is completed through its form’ (*ST I*, 29.1 ad 4).⁹⁹ Hence, while both form and matter are necessary to the essence of a substance, form has a defining role in the nature of a thing.

For Aquinas, matter cannot exist without form. A corporeal substance is inherently form and matter. However, if we were to imagine the smallest particle in physical reality—an element—and conceptually separate its form from its matter we would not be left with a lump of actual stuff, but rather with un-configured matter. Aquinas calls this conceptual entity ‘prime matter’; ‘matter which cannot itself be decomposed further into matter and form’ (Stump 2003, 37). When part of a form/matter configuration, prime matter is the aspect that makes the configured object be extended in the three dimensions of the corporal world in a particular time. However, still quoting Stump:

⁹⁸ The talk of material parts being ‘organized’ in certain configurations that give rise to other capacities might to some bring up connotations to Functionalism. It is however, important to note that Aquinas is not compatible with functionalism due to the functionalist view of matter as void of formal and final causes. For as Feser (2009, 171–173) makes clear functionalists do not see matter as essentially entwined with form. Nor do material things have any inherent end (*telos*). Rather matter is essentially and even exhaustively describable in mathematical quantifiable terms of modern physics, and material objects are only related to one another by way of a specific notion of efficient cause.

⁹⁹ See Pasnau (2002, 8).

By it self, apart from form, prime matter exists just potentially; it exists in actuality only as an ingredient in something configured. So we can remove form from prime matter only in thought; everything which exists in reality is configured in some way. For this reason, Aquinas sometimes says that form is the actuality of anything. Configuration and organization is necessary for the existence of anything at all; without form, nothing is actual (Stump 2003, 37).

So while we can remove form from matter conceptually, everything that exists in reality is configured or has form. Hence, form as described by Aquinas is what makes everything that exists *actual*. That is to say matter without form—prime matter—can only exist potentially and is therefore no more than a logical abstraction.¹⁰⁰

Substantial and Accidental Forms

Substances have different features, capacities and properties due to their particular form/matter configuration. Nevertheless, this configuration might change in a substance, without the substance necessarily becoming something different. For example a lute's woodcarvings might wear away, but it remains the same lute. In order to account for this, Aquinas divides the form of material objects into two types; substantial forms and accidental forms. Three variables account for the differences between the two types of forms: '(1) what the form organizes or configures; (2) what the configuration effects; and (3) what kind of change is produced by the advent of the configuration' (Stump 2003, 38). The substantial form of material things configures prime matter, while an accidental form configures something that is an actual existing thing – a matter-form composite. Further, a substantial form brings into existence something new; and it is responsible for what kind or species this new substance is. An accidental form, on the other hand, does not change the kind of substance a thing is; it merely re-assembles non-essential features or properties of a particular thing. Accidental forms are attributes of particular actual substances; 'modifications that cannot

¹⁰⁰ As Pasnau notes: '*His talk of prime matter does not introduce some primitive, mysterious stuff. It does just the opposite, because it entails the complete rejection of matter as any kind of stuff having dependent ontological status...If prime matter was a real part of material substances, it ought to be corrupted when the substance is corrupted. So the very fact that Aquinas does treat prime matter as an enduring substratum shows that it cannot be a metaphysical constituent of substances*' (Pasnau 2002, 131).

exist on their own' (Eardely 2010, 29). Finally, anything that exists has no more than one single substantial form, but it can have multiple accidental forms. For example, what makes a human being be what it is, is its substantial form – its soul,¹⁰¹ any change to its substantial form would mean that it ceases to be a human being. This happens when the human being dies – it is no longer a human being, but a corpse. Accidental forms, on the other hand, such as a particular human being being skinny or corpulent, knowing one or two languages, and so on, might change many times throughout that human being's existence without changing its substantial form – it is and remains a human being (until it becomes a corpse).

Substances and Artefacts

Aquinas's understanding about substantial forms limits the number of ways into which already existing composite substances might be combined. For Aquinas, 'any case in which two already existing material things come together in some kind of composite without ceasing to exist as the things they were before they came together will similarly be a case of alteration rather than generation, and the new composite will be configured with an accidental, rather than substantial, form' (Stump 2003, 39). This means that any ordinary artefact—such as a pencil composed out of wood *and* graphite—is a composite of two (or more) already existing substances that are configured together into a particular whole, but—crucially—not by a substantial form. It is an accidental form that configures an artefact, and hence it cannot be a substance. However, in some cases, Aquinas does allow the possibility that two substances might combine so as to become a composite which is itself a substance. But in these instances, the form of each of the combining substances ceases to exist, and a new form of the whole compound is generated instead. Consistently with this, then, Aquinas holds that 'the parts of a whole are actual (rather than potential) things existing in their own right only when the composite of which they are parts is decomposed' (Stump 2003, 40). In other words, no substance (for instance flesh) counts as a substance in its own right as long as it belongs to a larger whole that is a substance (for instance a body). If this was not the case, a human being would have as many substantial

¹⁰¹ Which as I have noted above should not be confused with the essence of human being as Aquinas clearly understands the essence of a human being to comprise both soul and body.

forms as it does parts – an idea that Aquinas sees as bizarre.¹⁰² While we might see flesh as flesh whether it is part of the body or not, there is for Aquinas literally a substantial difference. A hand as a part of the body has a very different set of properties and functions than it does apart from the body.¹⁰³

To summarize, a corporeal substance comes into existence when a form configures prime matter. The most fundamental compounds of matter and form Aquinas calls ‘elements’, and all other corporeal substances are made up from them. When a new material substance is generated, its components cease to exist in their own right – even though they existed as such before; only one substantial form configures the (new) whole. An artefact, however, is a re-arranging of the components in such a way that the re-arranged parts keep their substantial form and an accidental form organizes the whole. So while an artefact still counts as *one* thing, it is in a weaker sense than the unity of a substance.¹⁰⁴

Act and Potency

On Aquinas’s account, any thing, any compound of form and matter, is also a compound of act and potency. It is the distinction of act and potency, along with the notion of substantial and accidental forms, that allows for change in a substance. Any substance has a number of features that are ‘actual’ and a number of features that are potential. For instance, a particular human being is 173 cm tall, weighs 70 kg, and has blue eyes and brown hair. At the same time, she is also potentially 77 kg (if she eats too many chocolates), or 67 kg (if she eats salad instead) or blind (if she should lose her eye sight), and so forth. Change, then, is a realization of some potentiality inherent to the substance, and brought about by some external influence. Or, as Aquinas puts it, ‘motion is the actuality of a being in

¹⁰² See *In Meta* VII.17.1680, VII.16.1633, *CT* 211 (409 – 410) and *SCG* IV.49 (3846) for elaboration on these points.

¹⁰³ While there is no space here to go further into the distinction between a substance and an artefact it is worth noting that there is a rather blurry line between the two, also they do not exhaust the class of things. As there are things such as a severed hand and a disembodied soul that are neither a substance nor an artefact. They would be parts of substances, what keeps them from being complete things in their own right is that they cannot be defined without some mention of the whole in their definition. Eleonore Stump (2003, 44) argues that the best distinction between an artefact and a substance is that the former configures things that already are in existence, while the latter configures prime matter.

¹⁰⁴ Aquinas thinks an immaterial substance is individuated by the substantial form unique to it. (*ST*. I, q. 50, art.1 and I, q. 50, art. 5)

potency' (*In Meta IX.1.1770*). Potentiality for Aquinas (and Aristotle) is hence not infinite or limitless, but is rooted in the nature of actually existing things. For example, a human being does *not* have the potential to become a stone, or to breathe under water. Neither can a thing bring about change in itself; an external factor is needed: 'potency does not raise itself to act; it must be raised to act by something that is in act' (SCG I.16.3).

The distinction between act and potency, then, is 'the distinction between the possibilities inherent within things and their realizations' (Eardely 2010, 27). This point distinguishes Thomistic metaphysics not only from the Cartesian framework, but also from the ancient philosophies Aquinas was engaging with. Now, for Aristotle (and his commentators), if something was material, it was also by default 'actual'. In other words, for them actuality was built into the basic metaphysics of a thing, either as something accidental or as a primitive un-analysable part of the corporeal elements. For Aquinas, by contrast, matter is only *actual* when it has form. Matter with no form (prime matter) is pure potentiality, and pure potentiality cannot exist (Pasnau 2002, 30–35).

Like matter cannot exist without form, potency cannot exist without actuality, for 'absolutely speaking act is prior to potency' (SCG I.16.3). Potentiality is embedded and rooted in what is 'actual'. To speak of something existing as pure potentiality, with no relation to an actual substance is for Aquinas incoherent and impossible. In sum, the distinction between matter and form applies to the corporeal world, while the distinction between act and potency applies to the whole created order; a corporeal substance is an indissoluble compound of matter and form, and act and potency.

Individuation

While the form is essential to the configuration (and hence the properties and capacities) and actualization of a substance, it is matter that is the 'principle of individuation' between members of a species of material things. As Aquinas puts it in *Being and Essence (DEE 2)*, 'the designation of the species with respect to the genus is through the form, and the designation of the individual with respect to the species is through matter'. That is to say; while forms are a kind of universal

(though, as we have seen, not the Platonic kind), matter is what distinguishes one specific corporeal substance from another.¹⁰⁵ For Aquinas, universals exist only in the mind, while everything that exists in corporeal reality is a particular.¹⁰⁶ The issue is, however, a bit more complex than this; matter is also, as we have seen, part of the essence of a thing. As Stump (2003, 47) argues, prime matter cannot be what individuates a thing, since it is lacking any form and extension and furthermore only exists potentially. Existing material substances, on the other hand, have a fixed amount of matter. An existing material substance has a particular extension in space. If a specific lump of matter was accountable for the individuating of forms, then every form would change as the size of the chunk of matter changed. But Aquinas holds that the particular quantity of matter is only an accidental property, and so something that a thing can gain or lose while still remaining the same thing. Aquinas seeks to resolve this by making a distinction between matter in general ('common matter') and this or that particular grouping of matter ('designated matter' or 'signate matter').

Thus, we must point out that matter understood in the way we have thus far understood it is not the principle of individuation; only signate matter is the principle of individuation. I call signate matter matter considered under determinate dimensions. Signate matter is not included in the definition of man as man, but signate matter would be included in the definition of Socrates as Socrates if Socrates had a definition. In the definition of man, however, is included non-signate matter: in the definition of man we do not include this bone and this flesh but only bone and flesh absolutely, which are the non-signate matter of man. (Aquinas, DEE 2)

To put this much more simply: while all human beings are corporeal, what makes this particular man different from that particular man is the distinct matter out of which each respectively is composed. What makes Socrates *Socrates* is neither that he has a set of properties unique to him, nor that he has an additional set of

¹⁰⁵ 'In the case of immaterial substances, these are individuated by the substantial form unique to each of them'. (*ST.* I, q. 50, art.1 and I, q. 50, art.5)

¹⁰⁶ The section on the mind will go more in depth on the interplay between the intellect and universals in cognition. Aquinas holds that '*a universal is the concept a knower has when he abstracts, for example, redness from a material thing which the particular form is and considers it just redness, apart from its association with the particular matter it configures*' (Stump 2003, 49). Also see *In Meta* VII.11.1521.

properties on top of the ones that make him a human being. Rather what individuates him as *this person* is *this* substantial form configuring *this* matter.

Constitution and identity

In *In Meta* (VII.17.1672-1974), Aquinas claims that in cases where the composite thing is one thing, the composite is something more than the sum of its components. A thing's constitution, its make-up, is hence not equated to the thing's identity. It is substantial forms that configure prime matter—not their integral parts, which are themselves matter-form compounds—which again means that a *supposit*¹⁰⁷ is not identical to the sum of its inherent parts. Indeed, each part loses its prior form the very moment it becomes included in a new whole under the particular substantial form. In summary, then, Aquinas's view involves 'that for substances constitution is not identity, for the constituents of either a metaphysical or an integral sort...even for artefacts, constitution is not identity' (Stump 2003, 51). An analogy from chemistry might be helpful here: compounds are substances made up of elements whose essential natures undergo a change when in the compound; mixtures, by comparison, are made up of elements that retain their essential natures while in the mixture. Furthermore, mixtures can be made up of compounds. Take for example a mixture of two elements, such as sulphur (powder) and iron (powder). As powders, the two substances mix as yellow sulphur powder and black iron filings, but each substance remains what it was prior to the mixing. A compound made of the same substances, however, is very different. Here the two elements form bonds with each other and thus one might say that their respective essential natures change. Such a compound might look like pyrite (fool's gold), which is very different to the mixture. Mixtures are not substances, neither in Thomistic metaphysics, nor in modern chemistry.¹⁰⁸

In other words, a material supposit is not identical to its constituents of matter and form, and so loss of either matter or form is not in itself enough to necessitate the loss of the whole supposit. Based on this, Aquinas can hold that a supposit can

¹⁰⁷ 'Supposit' is the term Aquinas uses to designate a thing which has a particular substantial form – it refers to a specific thing within the category of substances, as 'person' is Aquinas's word for an individual substance of rational nature.

¹⁰⁸ Thanks to Dr. Stephen Boulter for giving me this analogy and to Dr. Nathan Rose for providing an example.

endure the loss of some of its parts as long as the remaining parts are adequate to ensure the survival of the supposit. In the case of a human being, it is obvious how this applies to the continual renewal of cells at a micro level, for instance, or even the loss of larger integral parts of the whole, such as a hand or a leg. So, for instance, while under normal circumstances a human being would have two legs, losing them—even though they are integral parts of the whole—would not amount to the human being losing its form as such. While the normal condition of a human being is to be a compound of matter and form, even after the tragic loss of two legs, there is enough left of the human being—the supposit—in its substantial form for it to continue to exist as such. Stump (2003, 50–54) argues that this is compatible with Aquinas’s famous passages claiming, that ‘since a soul is part of a body of a human being, it is not the whole human being, and my soul is not me.’¹⁰⁹ She explains Aquinas’s position in the following way:

A human person is not identical to his soul; rather a human person is identical to a particular in the species rational animal. A particular of that sort is normally, naturally, constituted of an array of bodily parts and is composed of form and matter. Because constitution is not identity for Aquinas, however, a particular can exist with less than the normal, natural complement of constituents (Stump 2003, 53).

This is consistent with Aquinas’s view of change as adopted from Aristotle – a thing, which gains or loses an accidental form undergoes change while remaining one and the same thing; it is possible to lose or gain constituents while remaining the same thing as long as the substantial form is the same. In other words, a substance is therefore more than the sum of its parts, providing a metaphysical grounding for the notion of emergences lacking in the Cartesian framework.¹¹⁰

Causation

As described in an earlier chapter, causation is one of the big issues entangled with the mind/body problem in philosophy of mind today. Already in 1605, Francis Bacon pointed out in his *Advancement of Learning* that the natural sciences of his

¹⁰⁹ For more see Aquinas’s commentary on the Corinthians chap. 15, 1.2.

¹¹⁰ For Aquinas, this notion of constitution and identity extends as a special case to metaphysical parts in human beings: their substantial form can exist on its own. A human being ‘...can, for example, exist when it is constituted only by one of its main metaphysical parts, namely the soul. And so although a person is not identical to his soul, the existence of the soul is sufficient for the existence of a person’ (Stump 2003, 53).

day 'doth make inquiry, and take consideration of the same natures: but how? Only as to the material and efficient causes of them, and not as to the forms' (1842, 197). Since David Hume, modern philosophy has been inclined to regard it as possible that any cause might produce any effect or none. In Hume's words, causes and effects are 'loose and separate', with no 'necessary connection' holding them together. The only 'constant conjunction' between a cause and effect, as the Humean argument continues, is our experience that disposes us to anticipate the latter in presence of the former. The inevitability 'with which we think the one brings about the other may be merely a projection of this expectation, thus deriving from our subjective psychological tendencies rather than any objective features of the cause and effect themselves' (Feser 2009, 20).

Generally speaking, the contemporary debate continues in a similar vein: mental states are understood as determined by neural events, and these events are seen as determined by factors causally outside the agent/mind. This view rests on the related assumptions of the causal completeness of the physical realm at the micro level, and that everything can ultimately be explained in terms of its microstructure. However, as Bacon pointed out, this perspective fails to take into account the importance of form, in the Thomistic (and Aristotelian) sense. Furthermore, the contemporary view fails to account for the causal efficacy things have due to their form or level of organisation. Hence, if one is to take the notion of form ontologically seriously, as Aquinas suggests, the assumption of causal completeness at the micro-level must be rejected and replaced with a broader notion of causation.

Hume's separation of efficient causes from final cause would have been unintelligible to Aquinas, and gives rise to a host of notorious philosophical puzzles. Equally unintelligible he would find the modern concept of causality as a relationship between temporally ordered events. Following Hume, causation is currently seen as a series of events one following another in a linear fashion i.e. the glass is nudged -being one event and the glass topples -being the subsequent event. The modern philosopher concludes that since the latter event comes after the first event they must be separate, and therefore it also follows that in principle the effect might fail to follow the cause. The core issue of causation in Hume's

formulation is then accurately accounting for the manner two temporally separate events are related. And as described in the paragraph above Hume ‘decides this by opting for psychological projections into reality rather than conceding the existence of necessary connections of nature’(Wallace 1974, 569).¹¹¹ In a Thomistic framework this would be bizarre, as ‘it is the *things* that are causes, not events; and the immediate efficient cause of an effect is *simultaneous* with it, not temporally prior to it...[They] are really just the same event considered under different descriptions’ (Feser 2009, 21). For Aquinas, cause and effect cannot be detached from each other. Nor can efficient cause stand alone in accounting for change and motion.

Building on Aristotle’s analysis of change, Aquinas operates with four different causes: material cause, formal cause, efficient cause, and final cause. In order to have a complete and scientific understanding of something one needs to understand all four of these. The four causes apply to both artefacts and corporeal substances or the natural world in general. Material cause is the stuff out of which a thing is made. To use a classic example of a bronze statue, the material cause is the bronze lump from which the statue has been formed. The formal cause is the organization or structure of the matter and gives a thing its features. In other words, material cause and formal cause are a particular thing’s matter and form understood as parts of a complete explanation of the thing. Following Aristotle, Aquinas takes efficient cause to be ‘that which actualizes a potency and thereby brings something into being’ (Feser 2009, 16). In other words, there must be a source of motion or change. In the example of the bronze statue, the efficient cause is the actions of the artist shaping the lump of bronze. Lastly, the final cause signifies the *telos*—purpose, goal or end—of a thing. In the case of the bronze statue, the final cause might be to beautify someone’s garden or to pay the artist’s bills. Of course, there are many more things you might want to know about the making of the statue, but whatever more might be said about it would amount to

¹¹¹ ‘Aristotle, on the other hand, accepts the fact of productivity or causal efficacy in nature, and so defines cause as to have it actually causing only when it is producing an effect, and thus at best instantiated when cause and effect are simultaneous. While not rejecting the possibility of antecedent causation, in the sense of denying outright that the cause might somehow temporally precede the effect, Aristotle treats this possibility as troublesome and as contributing little or nothing toward the understanding of basic causal processes’ (Wallace 1974, 569).

elaborations on its material, formal, efficient and final causes. Together, the four give a more complete account of the statue.

Before we turn to the implication of this fourfold understanding of causality for Aquinas' view of human nature, a few more things need to be said about efficient and final causes. Again, Aquinas largely follows Aristotle, who defined efficient cause as 'the primary source of the change or coming to rest; e.g. the man who gave advice is a cause, the father is cause of the child, and generally what makes of what is made and what causes change of what is changed' (Aquinas 1995, 281). An efficient cause may be external, as in the case of the artist sculpting a statue, or it might also be internal, a natural motion, as when an apple turns from green to red or the growth of plants and animals. When the efficient cause is internal it is part of the form in the thing that changes. The soul is the source of motion and growth for all living things –plants, animals and humans. However, the understanding of natural motion also applies to inanimate things, since even inanimate things have a particular way of behaving according to their *telos*.

This further means—contrary to Hume—that efficient cause cannot at all be separated from final cause; indeed, the former makes no sense without the latter. The final cause is a thing's 'end', that is 'the sake for which something is done' (Aristotle *Metaphysics* book V, Lesson 2 1013a24 – 1013b4) or 'to have a natural inclination toward something' (*DPN* 3.9). If there were no such inherent directedness towards a certain type of effect(s) in a cause, there would be no reason for a particular event to bring about just that effect or range of effects. Importantly, then, when one speaks of a thing's final cause, this is different from speaking about the thing's various functions. Every function is an example of final causality, but not every final cause necessarily entails a function – if by 'function' we mean the kind of capacity a bodily organ fulfils in the life of a creature, or 'function' as an integral aspect of a larger system. On the Thomistic (and Aristotelian) account, wherever a process or some natural object has a proneness to cause a certain effect or range of effects, its final cause is thus made clear. Goal-directedness exists wherever there are regular cause and effect patterns, and they are not dependent on consciousness. In all causal processes in the natural world, argues Aquinas, the directedness towards a particular effect or selection of effects

is apparent. For instance, a match is directed towards the production of fire, but is obviously not aware of this. A thing's *telos* 'shapes' the formal and material causes as well, because if a substance has a particular end goal, then the form and the material must be suitable to fulfil that end. For instance, a match's *telos* is to light a fire; hence it is not made out of steel, but wood. Further, a thing's *telos* must be potentially inherent in the object or being (remember here Aquinas's distinction of act and potentiality, so fundamental to his entire metaphysical framework). So, the unlit match could potentially be lit, which would bring its *telos* into actuality. The final cause is indeed 'the cause of all causes'.

Aquinas's metaphysics presents reality as inhabited by objects and creatures existing in different modes of being. Form and matter constitute the material, corporeal world. All substantial things are in a state of act—they are actual—with inherent potentialities. By distinguishing between substantial and accidental forms, Aquinas is able to account for how changes occur, without defaulting to reality as infinite flux. His view of the corporeal world as *hylomorphic*¹¹²—that is, as consisting of form/matter—allows him to see substances as more than a sum of their parts. This is how the Thomistic framework makes ontological sense of 'emergent' features of reality. Further, this way of understanding the physical does not make a distinction between primary and secondary qualities (since it sees what are now called secondary qualities as modes of being), thereby avoiding all the problems that follow in the wake of the said distinction.

For instance, one major challenge in contemporary philosophy is providing a satisfying account of the relation between mental properties and the brain's properties—or the causal relationship between two separated events—without being reductionist. With the Cartesian impoverished notion of matter and causation, this is proving virtually impossible. By contrast, the *hylomorphic* view of reality found in the Thomistic framework provides a profoundly different way of approaching the entire issue. In Thomistic metaphysics, the mental or soul is *not* a immaterial substance co-joined with or trapped within an organic-mechanical

¹¹² 'Hylomorphism' is simply a compound word composed of the Greek terms for matter (*hylê*) and form or shape (*morphê*), and is a label sometimes used to designate the Aristotelian/Thomistic theory of form/matter.

body. The relation is merely one of form/matter. Thus, for Aquinas, it is not any particular part of the substance—such as the brain—that thinks, but rather the whole embodied human being. The next section will turn to the implication of the above for the Thomistic view of human nature.

4.3. Human Nature

For Aquinas, any understanding of human nature needs to take into consideration the totality of the human being in light of a larger metaphysical framework; it cannot be reduced to a question of brain functioning. In this sense, Aquinas stands in opposition to both Cartesian dualism—which holds that a human essence is precisely that it is a ‘thinking thing’ distinct and independent of the body¹¹³—and also the majority of contemporary neuroscientists who consider the mind to be identical to the brain, thus ascribing psychological attributes to the brain.¹¹⁴

What makes Aquinas of particular interest to the contemporary discussions in Philosophy of Mind on the mind/body problem is that he holds the mind to be neither a distinct substance from the brain, nor as identical to the brain. Aquinas casts the wide range of psychological attributes and the powers—such as perception, thought, emotions or intentionality—that define human beings as attributes of human beings in their entirety, understood as embodied rational beings. Human psychological capacities are in other words not traits of specific parts, such as the brain. Instead, it is the human being as a whole that feels and thinks. As Hacker articulates it: ‘the brain and its activities make it possible for us—not for it—to perceive and think, to feel emotions, and to form and pursue projects’ (2003, 3).

In the following, we will see that Aquinas—due to the nature of forms in general and in the instance of the rational soul of human beings more specifically—sees a

¹¹³ *My essence consists solely in the fact that I am a thinking thing. It is true that I may have (or, to anticipate, that I certainly have) a body that is very closely joined to me. But nevertheless, on the one hand I have a clear and distinct idea of myself, in so far as I am simply a thinking, non-extended thing; and on the other hand I have a distinct idea of body, in so far as this is simply an extended, non-thinking thing. And accordingly, it is certain that I am really distinct from my body, and can exist without it’* (Rene Descartes 1984, 54).

¹¹⁴ See P.M.S. Hacker and M.R. Bennett’s poignant book *Philosophical Foundations of Neuroscience* (2003) for a deliberation of the conceptual confusion common in neuroscience.

human beings as ‘essentially embodied creatures, and moreover essentially have bodies of a certain kind’ (Pasnau 2002, 8). Of course, as explained above, bodies (matter) themselves are not the essence of a human being. Both matter and form, as well as essence and existence, and being in a state of act with certain inherent potentialities, are required to make that thing what it is; ‘If the soul is a form, its definition will not be complete without reference to its subject matter’ (Commentary on Aristotle’s *De Anima*, Book II, Lec 1. 213). On the Thomistic view, then, human nature cannot be cast as a mind in some secret relation to a brain trapped in the skull of a body.

Furthermore, as will be explicated in what follows, the Thomistic framework allows for even richer and more inclusive accounts of personhood and human nature. For instance, when discussing the persons of the Trinitarian godhead, Aquinas develops a notion of the person as relational and self-communicative, and that these attributes flow from its very status as being. While Aquinas himself does not develop this notion of personhood beyond the trinity, some current philosophers attempting to re-appropriate Thomistic thought have drawn on and developed this theological notion of Trinitarian personhood, and applied it to the philosophical notion of human persons (Clarke 1993, 617), thus providing a way of approaching ‘the person as intrinsically self-communicative, relational, and therefore interpersonal.’

The Soul and Body

The question ‘what is a human being?’ might be understood in many different ways. One might—as many have—approach the question in terms of biology, DNA, function, language, cognition, or culture. For Aquinas, the question is a metaphysical/theological one: what is it that makes this particular material stuff human? Since for Aquinas every corporeal thing is a compound of form and matter, a human being is a soul (a form of a particular human kind) *and* a body. That is, in response to the question ‘what is a human being?’ Thomistic metaphysics gives an account of the human soul as the form of the kind of being in question, focusing on the body only as it relates to the soul. Now, since the contemporary debate largely takes place within a Cartesian framework, it is not at all clear to everyone that

human beings even have a soul. Indeed, many might agree with David Hume, who in his *Treatise of Human Nature* (1739) declared the soul to be ‘fiction’, something ‘unknown and mysterious’ (I.iv.6). But here it must be emphasized that the Thomistic use of the term ‘soul’ is very different. Aquinas gives the following rationale for proposing a soul in human beings (as well as all living things):

In order to investigate the soul's nature one must hold from the start that the soul is said to be the first principle of life in the things that are alive around us. For we say that ensouled things are living things, whereas non-ensouled things are those that lack life. (Aquinas ST I, q.75, art. 1c)

As the above passage makes clear, to have a soul is to be alive, and this applies to all living things – plants and animals as well as human beings. Crucially, the soul is not a separate force or substance. It is rather ‘the first principle in terms of being that which is primarily responsible for the existence of a living being and it is first in what contributes as the purpose of a living being...it is *the actuality of a living body*’ (Pasnau 2002, 27–29). The soul is the form and the very actuality of the living body. Hence, the soul cannot itself be reduced to the body, for as Aquinas argues,

...no body can be the first principle of life. For it is clear that to be a principle of life, or to be a living thing, does not hold of a body as the result of its being a body: otherwise every body would be a living thing, or a principle in life. Therefore it holds of some body that is a living thing, or else is a principle of life through it being such a body. But as for the fact that it is actually such, it has this from a principle that is called its actuality. Therefore the soul, which is the first principle of life, is not a body, but the actuality of a body. (Aquinas ST I, q75, art.1. Following obj.3)

As Pasnau explains, ‘nothing bodily can be the first principle of life is equivalent to saying that nothing bodily can be the primary explanation of a body’s being actually such as to be alive’ (Pasnau 2002, 37). Corporeal explanations—that is, explanations that refer ‘back to the body itself’, as it were—can therefore only be partial. The reason for this is that it is merely a contingent fact that material stuff might serve to tell the difference between the living and the dead. Whenever one does try to give an explanation in terms of the corporeal stuff—for instance explaining life in terms of the heart pumping blood to the vital organs—one is in fact appealing to the structure and the function of the heart (in other terms, its

form) and not the physical stuff it is made of (its matter). For Aquinas, any acceptable explanation must ultimately be one attaining to form and actuality. As Pasnau continues, if we were able to give ‘a complete scientific account of how living bodies differ from corpses, we would thereby capture precisely what gives an animal life. This would be the first principle of life, the soul’ (Pasnau 2002, 39). Bearing in mind what has been said about the Thomistic metaphysical framework and its account of the corporeal world, the soul-body compound that makes up a human being is simply a particular instance of the form-matter unity of which the entire corporeal world is made up. Hence, by the term ‘soul’ Aquinas (following Aristotle) means no more than the form of a living thing; the term simply signifies one kind of form among others. Understood this way, the idea of the soul is not Hume’s ‘unknown and mysterious’ something which should be disregarded at first mention as fictional or archaic.

Both for Cartesian dualism and for contemporary materialism the question of unity or relation between the mind and the body is problematic. Thomistic (and Aristotelian) hylemorphism, by contrast, sidesteps the entire question. Or, better, the question loses its sting, so to speak, since it has no consequence beyond those we see in any other hylemorphic compounds, including ordinary artefacts. Just as we do not think that it is strange that the form of the table and the wood out of which it is made are ineluctably related, neither is the soul as the form of the body a strange idea. As Aristotle says:

It is not necessary to ask whether soul and body are one, just as it is not necessary to ask whether the wax and its shape are one, nor generally whether the matter of each thing and that of which it is the matter are one. For even if one and being are spoken of in several ways, what is properly so spoken of is the actuality (De Anima ii 1, 412b6–9).

It is not that unity is somehow achieved through some claim that the soul and body are identical or are ‘one’ in a weaker notion – this Aristotle explicitly denies (*De Anima* ii 1, 412a17; ii 2, 414a1–20). Rather the soul as the form of the body is necessarily present whenever the body itself is present; it is what shapes prime matter and brings the body into actuality.

Granted that the soul is a form which makes matter a living thing/body, and that the unity between soul and body is hence—generally speaking—no different than that of other compounds of form and matter, we can now move on to look at the soul’s distinctive capacities and the peculiarities of the human rational soul. ¹¹⁵

¹¹⁵ One of the peculiarities of the human soul in Aquinas is his notion of the soul as subsistent. As this aspect of his work can be rather confusing and is on the side-line of the main argument made in this thesis the reasons for why he holds that the soul is subsistent can be found here.

While the soul is the form of the body, it is not like any other form of material substances. According to Aquinas, the souls of plants and animals stop existing when they undergo substantial change; that is, the substantial change from body to corpse – or, more plainly, death. The rational soul, by comparison, is subsistent – it has its ‘existence not in others, but in itself. Accidents provide the clearest example of things that do not subsist, because it is precisely the nature of accidents to exist in an other thing’ (Pasnau 2002, 48). Part of the rational soul’s uniqueness is that it is (at least in part) immaterial and subsistent. Its subsistence is however dependent on its immateriality, and Aquinas gives several arguments and reasons for why he considers the soul to be immaterial. The rational soul in Aquinas however, is not subsistent in the Platonic sense. For Aquinas, there is no rational soul prior to its actualization of matter. While the rational soul is subsistent and can continue after death, its disembodied state is hence unnatural. The human being’s soul is only part of a complete human being; any entity that is a member of the human species must have a body and soul. The rational soul is unique in that it straddles both the material and the spiritual realm: ‘like an angel, the human soul is itself a configured subsistent form, but like the forms of other material things, the human soul has the ability to configure matter. The human is a configured configurer’ (Stump 2003, 200). According to Aquinas the human soul is the noblest of all the various forms that configure matter. While other corporeal forms are a result of matter being brought from potentiality to actuality by some composite agent, the rational soul is created directly by God and infused into matter. It is important to note that the soul is not made prior to the body, but comes to be at the same time as the body at the culmination of human generation. In other words ‘on the one hand, unlike forms of other material objects, every soul is directly created by God as an individual thing in its own right, with its own configuration. On the other hand like the form of any material object, it exists in the composite it configures, and it comes into existence only with that composite, not before it’ (Stump 2003, 207).

Secondly, the soul is subsistent because it has an operation that it performs on its own, namely part of our intellect. Pasnau summarizes Aquinas’ rationale: ‘If something can operate on its own then it must be able to operate independently of other things. If that thing exists in something else, like an accident or a material substantial form, then it would be entirely dependent on that other thing, and could not even exist without that thing. But existence is a pre-requisite for any operation. Therefore a thing’s operating on its own entails its subsisting on its own (and also entails separability)’. (Pasnau 2002, p.50) Aquinas establishes the subsistence of the soul by showing that the intellect is not a body and that it does not operate through a body. It is important to note here that Aquinas is not putting forth a quasi-scientific argument concerning human cognition that can be disproved by neuroscience; rather he is attempting to give a metaphysical demonstration. Aquinas ‘is in fact claiming that it is in principle impossible, conceptually impossible for the intellect to be accounted for in a materialistic way’ (Feser 2009, 157). For Aquinas, then, the intellect is irreducible to sensation (a wholly bodily process) due to the fact that ‘sense is cognizant only of singular (particular)’ while ‘the intellect is cognizant of universals, as experience proves’ (*SCG* II.66.3; cf *ST* I 12.4). The five senses give rise to imagination – mental images or “phantasms” to use Aquinas’s terminology. The intellect also cannot be reduced to imagination, due to the fact that the senses only experience particulars, while the intellect operates in terms of universals. The intellect can grasp universals as essences, which apply to indefinitely many individuals. Furthermore “sense cognition is limited to corporal things” while “the intellect knows incorporeal things, such as wisdom, truth, and the relation of things” (*SCG* II.66.4). As Feser puts it: ‘...precisely by virtue of being universal, the objects of the intellect are not material, for all material things are particular rather than universal. An individual triangle is a material thing – triangularity is not. If

The Rational Soul

According to Aquinas (who, again, follows Aristotle closely), the three main capacities of the soul include nutrition, perception and cognition. A nutritive or vegetative soul is that type of form which gives a thing the capacity of taking in nutrients, growing and reproducing itself.¹¹⁶ The sensory or animal soul is the form of a non-human animal. In addition to the powers of the vegetative soul it has the powers of locomotion and sensation, and the sorts of appetites associated with sensation and locomotion.¹¹⁷ An animal can therefore sense its surroundings—seeing, hearing, touching, and so on—and it can move around independently and it can be drawn to or retreat back from things it senses. The soul of a human animal is called the rational or intellective soul. It includes the powers of the vegetative soul and the sensory soul, and adds to these a particular human set of capacities: intellect and will. Human beings are capable of abstract reasoning, and of choosing between various courses of action on the basis of what the intellect knows.¹¹⁸

Aquinas considers the rational soul 'not as three nested cooperating forms, but as a

triangularity was a material thing then our knowledge of it would be of that particular and not a universal' (Feser 2009, 155).

Aquinas thinks that immaterial universals entail an immaterial intellect because any physical representation, such as triangularity represented as a pattern of neurons firing in the brain would be particular and could not possibly capture the universality of triangularity.

Thirdly, the way the intellect understands, as will be expanded on in the next section, is by taking on the form of the thing it is cognizing. If our intellect was a material thing it would mean that that material thing would become whatever was thinking about. But it would be absurd to think that matter in our brains actually configured into a flower were we to think of flowers. Since the intellect can grasp the form of all material things by taking on the form of multiple things, both over time and at a specific instance, it cannot be material. The intellect's ability to do this shows 'that the intellect has "potencies" which material things do not have (in *DA* III.7.680), and in particular that the intellect can, unlike material things, take on the form of other things (whether all of them or only some is irrelevant) without losing its own form (*SCG* II.49.3)' (Feser 2009, 153), therefore it must be immaterial and independent of the body.

However, the intellect is not independent of everything – it must have a subject. Aquinas understands this to be the soul. And as seen above, the rational soul for Aquinas is not that of Descartes; the intellect is not the essence of the soul, since Aquinas does not believe 'the intellect's operation (thinking) can be identified with the existence of a human being' (Pasnau 2002, 153). Given Aquinas' account of the origin of concepts, while the intellect is immaterial and subsistent it cannot operate without the senses, since it is impossible for the intellect to understand anything without turning to the phantasms. The intellect draws on the senses and imagination in order to function. In one way, the intellect is necessarily immaterial and independent of the body, yet it cannot operate without it as a separate entity – not even conceivably.

¹¹⁶ See Aquinas's Commentary on Aristotle's *De Anima* Book II, Lec 7-9

¹¹⁷ See Aquinas's Commentary on Aristotle's *De Anima* Book II, Lec 10 -24

¹¹⁸ See Aquinas's Commentary on Aristotle's *De Anima* Book III, Lec 7

single substantial form that gives a human being its specifically human mode of existence ... it is distinguished from the “other” souls by its rationality, by which the soul is subsistent and incorporeal’ (Stump 2003, 16).

This account of the human soul stands in stark contrast to the Cartesian account. Descartes’ theory of the soul might hence be seen as an attempt to eliminate the entire notion of substantial forms (James 2000, 119–123). Descartes understands the soul and body to be separate substances, each of which can act independently of one another and causally effect each other. The Cartesian soul is separate from the body in its functions. Descartes completely reframes the powers of the tripartite nature of the Aristotelian/Thomistic soul; among other things, he casts the vegetative powers and sensory powers of the soul as mere functions of the body. Thus, the soul is no longer the principle of life in a living body; instead, the body is seen as mechanistic matter – a complex organic machine. This Cartesian move in fact blurs the line between animate and inanimate substances in the material world; by denying plants and animals soul, Descartes redefines what life means. Human beings are the only things that have souls, and the only capacity left to this soul—now entirely independent of the body—is thinking. Unlike Aquinas, Descartes does not see human intellect as dependent on the senses as ‘the source of its ideas’. Instead, he sees ‘the mind [as] supplied by God with innate ideas of thought and extension’ (Patterson 2000, 79). Sensation, for Descartes, is hence in the mind and does not have any place in the body; therefore there is no Aristotelian/Thomistic concept of ‘intentional form’ passing from the object to the sense organ. For Aristotle, sensation and imagination might exist without intellectual powers since they are powers of the sensory/animal soul; for Descartes, sensation and imagination are ‘purely’ intellectual acts, performed by a ‘thinking thing’. As Patterson elaborates, for Descartes, the mind...

...can be understood as a complete thing without the faculties’ sensation and imagination. It is capable of existing without them, because the human intellect is equipped by nature with innate ideas... This independence of mind from the body underwrites Descartes’ case for the possibility of the soul’s existing after the death of the body. Descartes’ physics is founded not on sensory conception of matter but on a clear and distinct innate idea of matter as geometrical extension. Matter, extended substance, is not dependent for its existence or its properties on soul-like substantial forms; physical phenomena

(including life) can be explained as a result of parts of matter moving according to the Laws of motion established by God (Patterson 2000, 100–101).

Descartes equates the human being with the mind (thus understood). By contrast, Aquinas does not identify a human being with its soul. The Thomistic view is that a human being is not its soul, but an irreducible composite of soul and body (its form and matter). The rational soul is the configuration of matter that makes the body of a human being. We might put it this way: the rational soul is the form of the body and consequently it follows that the soul is immaterial. However, this is not at all to say (similar to Descartes) that the soul is an immaterial substance. In fact, as Stump points out ‘the [Thomistic] soul has spatial location; while the body is alive and the soul configures it, the soul is located where the body is’ (Stump 2003, 202). While Descartes claimed that higher cognitive function only occurred in the soul and not in the body, Aquinas thinks that it is confusing to assign cognitive functions just to the soul itself. ‘We may therefore say that the soul understands, as the eye sees’, he says, ‘but it is more correct to say that man understands through the soul’ (*ST I*, q. 75, art.2 ad 2). Likewise, in *ST I*, q. 76, art. 1, Aquinas expands on the question of ‘whether the intellectual principle is united to the body as its form?’ In response to this, he specifically argues that ‘the intellect, which is the principle of intellectual operation is the form of the human body.’ In short, Aquinas’ notion of the rational soul is vastly different from that of Descartes, because he does not identify a human being with its soul or see the intellect as a capacity residing only in the rational soul.

The Mind and Intellect

Importantly, Aquinas is not attempting to give a scientific account of the mind or intellect in the strict modern sense of the term. His theory is rather an articulation of philosophical truisms in an attempt to avoid conceptual confusion regarding to the nature of a human being. The rational soul is the form of a human being; it is first and foremost the form of the body – that which gives a particular body its life and existence. The capacity for rational thought or the operation of the mind is subject to the soul. Aquinas understands the cognitive process as a whole (the mind) to be an integrated and complex process between the senses and the

intellect, a process which he breaks down into separate processes for the sake of understanding. For instance, he speaks of the intellect as *propria*; ‘a proprium is not part of the essence of a thing, but it is caused by the essential principles of the species’ (Pasnau 2002, 156). Because the soul is first and foremost the form of the body—that is, the soul’s essential nature is to be that which makes a body exist and live—and since we do not constantly go around thinking and sensing, and yet continue to exist and live, this means that the intellect cannot be part of the soul’s *essence*. For Aquinas, then, ‘the human intellect can be identified with the soul’s essence only if the intellect’s operation (thinking) can be identified with the existence of a human being’ (Pasnau 2002, 153). Or as Pasnau articulates it:

Since the soul’s essence is always actualized, for as long as the substance exists, the soul’s various powers will be part of its essence only if those powers are always actualized. But those powers are not always actualized; a human being is not always actually engaged in intellectual or sensory operations. Hence these operations do not come directly from the soul’s essence. They come from separate powers. Still, the possession of those powers is a prerequisite for being human, and so a living thing does not possess the capacities themselves. Hence the capacities come directly from the soul’s essence. All the soul’s capacities...flow from the essence of the soul as their basis. (Pasnau 2002, 156)

In Aquinas’ contemporary philosophical and theological milieu, the relationship between the soul and the intellect—since they both were immaterial—was just as much of a problem as today’s mind/body problem. Seen in this context, the view Aquinas puts forward (in *ST I*, q.77) is in fact a difficult stance between conflicting views: ‘A human being has but one substantial form, its soul, which is the form of the body. The intellect is not identical to its soul, but it is part of the soul, and it flows from the soul’s essence’ (Pasnau 2002, 160). The soul is the form of the body in its essence, yet the intellect which is ‘part of’ the soul is not itself a form of anything. Aquinas could not make these claims without the distinction he makes in *ST I*, q. 77, art.1.c between the soul and its capacities.

This is notably different from what we find in the philosophies of Aquinas’ (more or less) contemporaries John Duns Scotus and William of Ockham, who held that the soul’s essence and its capacities are the same. Holding to other metaphysical principles than Aquinas, they do not make this distinction (Pasnau 2002, 157–

160). For Aquinas, however, the distinctions preserve vital elements of his metaphysical framework. They allow him to hold together his hylomorphic view of the soul and body, as well as the notion of the soul's subsistence and the intellect being immaterial and yet bound to a particular and actual body.¹¹⁹

Cognition: embodied intellect

In contrast to Descartes, Aquinas does not postulate an immaterial mind that thinks all by itself quite apart from the bodily senses; he describes cognition as a fully embodied process starting with sensations. So while the intellect is indeed immaterial (in Aquinas' sense), it is nonetheless dependent on the senses to furnish it with ideas: 'the intellect's operation arises from sensation' (ST I, q.78, art.4 ad4). Therefore, in order to understand Aquinas's account for the working of the intellect, one has to begin from his account of sensation.

There are five senses—sight, hearing, touch, taste and smell—which are 'individuated by diversity of function. Sight and hearing differ not because eyes are different from ears, but because colours are different from sounds' (Kenny 1994, 33). Aquinas, (once again following Aristotle) describes the senses as passive powers that undergo change caused by external objects:

Aristotle concludes that the sensitive soul is clearly not actually, but only potentially, the sense-object. That is why sensation will not occur without an exterior sense-object, just as combustible material does not burn of itself, but needs to be set on fire by an exterior agent; whereas if it were actually fire it would burn simply by itself. (De Anima, II, 6: 354)

In order for a sensation to occur there must be an external object with the corresponding potential power that brings about that change in the matching sense organ. For example, the sourness of a lemon is a sensible object that can be tasted. My ability to taste is a sense-faculty. Me tasting the lemon is the same event as the sensible object's (the lemon) acting upon my sense of taste; the lemon

¹¹⁹ We might note that the *Treatise* (ST 1a Q75 -89) is thus prevented from falling into a circular argument. Furthermore Aquinas's emphasis on the soul's capacities is a result of a significant methodological principle: that the soul's essence cannot be known directly. Due to the limited scope of this study of Aquinas I will not go in to further depth of this issue. Aquinas' arguments can be found in ST 1, q. 75-77, and Pasnau unpacks them in (2003, Chapter 5). A full account of Aquinas's theory of intellect is found in his *Treatise of Human Nature* in ST I, q. 75 -89 and a more in-depth account is found in DA III.7-12. For a more extended survey of Aquinas's philosophy of mind see Kretzmann (1993, chapter 5), Kenny (1994a) and Stump (2003, Chapters 7-9).

tasting sour to me is the same event as me tasting the sourness of the lemon. In other words, while the lemon is potentially sour all the time it is only actually so when it is tasted by someone. The sensory-faculty of taste has the potential power to taste things such as sourness; the lemon has the potential power to taste sour to a matching sense organ. Here Aquinas makes an important distinction between the property of sourness and the power to taste.

In some sense, then, a thing is acted upon by both its like and its unlike (as we have already remarked). At first, and while the transforming process is going on, there is dissimilarity; but at the end, when the thing is transformed and changed, there is similarity. And so it is as between the sense-faculty and its object. And the early philosophers went wrong because they missed this distinction. (De Anima, II, 6: 357).

What is happening when I taste the lemon is a particular instance of change. The sense-faculty itself becomes like the sense-object by taking on the form of the sense-object. This should not be confused with Aquinas's notion of substantial change, where the taking on of another form makes it actually become that thing. As he points out in ST 1.78.3c the eye does not change colour when seeing something coloured. The notion of change Aquinas (following Aristotle) wants to evoke when talking about sensation is one of 'intentional change'. Here is his version of Aristotle's original example:

Aristotle finds an apt example of this in the imprint of a seal on wax. The disposition of the wax to the image is not the same as that of the iron or gold to the image; hence wax, he says, takes a sign, i.e. a shape or image, of what is gold or bronze, but not precisely as gold or bronze. For the wax takes a likeness of the gold seal in respect of the image, but not in respect of the seal's intrinsic disposition to be a gold seal. Likewise the sense is affected by the sense-object with a colour or taste or flavour or sound, 'not in respect of what each is called as a particular thing', i.e. it is not affected by a coloured stone precisely as stone, or sweet honey precisely as honey, because in the sense there is no such disposition to the form as there is in these substances; but it is affected by them precisely as coloured, or tasty, or as having this or that 'informing principle' or form. For the sense is assimilated to the sensible object in point of form, not in point of the disposition of matter. (De Anima II, 24: 554)

We might say that in every event of sensation there is an 'imprint' of the sensed object's form on the sense faculty. So while a change has occurred in the sense faculty, in it taking on the form of the responsible sense-object, the form is not

instantiated in the same way as in a normal form-matter compound. The change that has occurred is an 'intentional' one. That is, the senses have grasped the quiddity or form of the particular individual corporeal object they have sensed – a similitude. This similitude is however a particular and individual instance of the thing sensed, it is not (yet) a universal, and it does not in itself give any kind of knowledge. Thus far, it is simply raw data about the material world. Aquinas explains why this is the case:

Concerning what is said here, we have to ask ourselves (a) why sensation is of individual things, whereas science is of universals; and (b) how exactly universals exist in the soul. As to (a) we should note that while the sense-faculty is always the function of a bodily organ, intellect is an immaterial power—it is not the actuality of any bodily organ. Now everything received is received in the mode of the recipient. If then all knowledge implies that the thing known is somehow present in the knower (present by its similitude), the knower's actuality as such being the actuality of the thing known, it follows that the sense-faculty receives a similitude of the thing sensed in a bodily and material way, whilst the intellect receives a similitude of the thing understood in an incorporeal and immaterial way. Now in material and corporeal beings the common nature derives its individuation from matter existing within specified dimensions, whereas the universal comes into being by abstraction from such matter and all the individuating material conditions. Clearly, then, a thing's similitude as received in sensation represents the thing as an individual; as received, however, by the intellect it represents the thing in terms of a universal nature. That is why individuals are known by the senses, and universals (of which are the sciences) by the intellect. (De Anima II, 12: 377)

In short, Aquinas says that as the senses are the operations of bodily organs, the similitude they receive is instantiated in a bodily way; hence the similitude is necessarily particular and individuated. The intellect itself, however, is immaterial, and receives the universal nature of the similitude through a process of abstraction.

The next 'step' in the process of cognition is the following. The sense impression or similitude goes from the external senses to the internal senses where it is now called a mental image; or as Aquinas calls them, 'phantasms'. These are the 'likeness of particular material things re-realized in physical configurations of the organ phantasia...[though they are] stripped from their original matter, the phantasm-likeness is particularized by its details, the external object's original

individuating matter being “represented” by features of the phantasm’ (Kretzmann and Stump 1993, 140). The phantasms are stored and processed in various ways by internal senses—which Aquinas locates in the brain.¹²⁰ Aquinas describes four of these—‘the *sensus communis* or the unifying sense, the memory, the imagination or *phantasia*, and the faculty which in animals is called the *vis aestimativa* and in humans the *vis cogitativa*’ (Kenny 1994, 36)—but only two need highlighting here. The first is *phantasia*, or imagination, which is responsible for producing, rearranging the generic sensory data into phantasms (and preserve these as such) that the intellect is dependent on. Despite the mistaken belief of early modern empiricist philosophers such as Berkeley or Hume, this internal sense of imagination/*phantasia* is not the same as the intellect, because ‘imagination has to do with bodily and singular things only’ while ‘the intellect...grasps objects universal and incorporeal’ (*SCG* II.67.3). For example, while we cannot form a clear mental image of a 1530-sided figure, we can nevertheless have a clear concept of one, hence the two must be different. The second internal sense to consider for the present purposes is what Aquinas calls memory. Memory is ‘the mind’s capacity for retaining concepts and beliefs’ (Kenny 1994, 52). The crucial point to note here is that if a memory is a memory of a past object, it is not a universal and thus not a part of the intellect.

From the internal senses, in yet another step in Aquinas’ ‘breaking-down’ of the cognition process, the phantasms are then passed on to the intellect. As Aquinas puts it, ‘in the present state of life in which the soul is united to a passable body, it is impossible for our intellect to understand anything actually, except by turning to the phantasms.’ (*ST* I, q.84, art.7). Aquinas (after Aristotle) divides the intellect into the *agent intellect* (or active intellect) and the *possible intellect* (or the passive intellect).¹²¹ The reason for this is the dual nature of the intellect – it is at once potential and actual. On the one hand, the intellect is a passive power. This ‘...is made clear from the fact, that at first we are only in potentiality to understand, and afterwards we are made to understand actually.’ For human beings, then, to

¹²⁰ Again Aquinas is not attempting to give a scientific account, but a metaphysical one.

¹²¹ For the present purposes, we will disregard the complexities and incoherencies that emerge due to this distinction between the active and the passive intellect, as well as the possibility that the active intellect may be capable of existing without a body. Like in the case of the subsistence of the soul, it is interesting, but it does not ultimately bear on the argument of this thesis.

understand is 'in a way to be passive' (ST I, q. 79, art. 2.) We might put it this way: to understand is to undergo change, and in order to undergo change our starting point is always one of potentiality. This way, the passive intellect is where our understanding grows and evolves.

But the intellect must also be an active power. Since it can only cognize immaterial things, and because phantasms are (still) particular and material sense impressions, there is a need for the intellect to actively turn phantasms into thinkable objects. Aquinas explains why this must be so:

I answer that, according to the opinion of Plato, there is no need for an active intellect in order to make things actually intelligible; but perhaps in order to provide intellectual light to the intellect, as will be explained farther on. For Plato supposed that the forms of natural things subsisted apart from matter, and consequently that they are intelligible: since a thing is actually intelligible from the very fact that it is immaterial. And he called such forms "species or ideas"; from a participation of which, he said that even corporeal matter was formed, in order that individuals might be naturally established in their proper genera and species: and that our intellect was formed by such participation in order to have knowledge of the genera and species of things. But since Aristotle did not allow that forms of natural things exist apart from matter, and as forms existing in matter are not actually intelligible; it follows that the natures of forms of the sensible things which we understand are not actually intelligible. Now nothing is reduced from potentiality to act except by something in act; as the senses are made actual by what is actually sensible. We must therefore assign on the part of the intellect some power to make things actually intelligible, by abstraction of the species from material conditions. And such is the necessity for an active intellect. (ST I, q. 79, art. 3)

The active intellect causes, through a process of abstraction, the phantasms received from the senses to be actually intelligible. In other words, it 'strips away' all particularizing or individualizing features of a phantasm so as to produce a truly universal concept – an 'intelligible species'. Such intelligible species 'are causal intermediaries between our cognitive faculties and the external world' (Pasnau 1997, 195). It is therefore the active intellect which 'enables human beings to acquire and use language in their transactions with the world which we perceive around us' (Kenny 1994, 51). So rather than experiencing the world as raw sense impressions we see the world as full of trees, people, birds. This means (and provides a rationale for the idea) that we are able to have intellectual thoughts about the world and acquire scientific knowledge about it. This becomes

a distinguishing feature, marking human beings from animals: human beings share with animals the ability for sensation, but animals lack the understanding human beings have due to the agent intellect.

The final point to emphasise here is that strong connection Aquinas describes between the bodily senses and the intellect. In short, without the senses the intellect would be void; it needs sense impressions to begin with for there to be any process of cognition whatsoever. Hence, importantly, when Aquinas speaks of intelligible species and phantasms, these must not be confused with the accounts of subjective mental representations found in various forms of indirect realism. After Descartes and Locke, such kinds of representations, '[portray] thoughts, sensations, and other mental items as objects analogous to the words, pictures and other representations familiar from everyday experience, but having a subjective rather than objective mode of existence' (Feser 2009, 146). This means that we only have indirect access to the world around us, and so we can only have knowledge of our own subjective experiences. This leads both to the problem of how one might have real knowledge of the world, and to the problem of intentionality, or how our mental states receive their meaning. Aquinas's view is remarkably different from this. He does not see phantasms and intelligent species as mere representations, but instead holds that our senses experience the form of the external object. Despite the complexity of the process Aquinas describes, we might even call this a kind of direct (rather than indirect) realism. 'The sensible image is not what is perceived, but rather that by which sense perceives. Therefore the intelligible species is not what is actually understood, but that by which the intellect understands.' (*ST I*, q. 85, art. 2) Hence, what you perceive is the sense-object itself—for instance a rose—and what you think about is the actual rose and not just your concept of it. In other words, to think about a concept is not

...for it to have something analogous to a little picture or word in the mind, a kind of internal subjective entity which "represents" another external, objective entity. Rather, when the intellect understands something, it grasps its form. And this means that one and the same thing, namely the form of the thing understood, exists both in the intellect and in the thing itself.... one form which exists in two ways, an 'entitative' way and an 'intentional' way (Feser 2009, 147–148).

The sensory part of cognition is responsible for grasping particulars, such as *this* rose. The intellect as we have seen Aquinas holds to be immaterial and is not reliant on the activity of any corporeal object. The function of the intellect is to grasp universals – the *rosiness* of the perceived particular rose. To put it more bluntly, the intellect allows us to recognize a rose as a rose when we see (or smell) one. The crucial point is that Aquinas takes there to be some kind of formal identity between the external object and the intellect that is thinking about it. The very form of the external object sensed somehow resides in the intellect. The intellect abstracts and organizes the raw data from the sense impressions (phantasms), turning these into universal concepts. Hence, the intellect holds the form of a rose, but without becoming a rose itself.

The picture of human nature and the mind emerging from the Thomistic framework is a fully ‘embodied’ one – with a body of a certain kind. The mind is not immaterial, nor is it located solely in the brain. While the brain allows for neurological processes necessary for cognition, the psychological capacities and powers belong to the whole person, and are not features of the brain alone. Indeed, to thus attribute them to a part of a substance would be a grave category error. Contrary to the Cartesian framework, the Thomistic notion of the rational soul is not that of an ‘analytical’ mind trapped within an organic machine. We might say that the notion of a human being is understood in terms of the person rather than the individual. The distinction between the two would lie in the difference between the Cartesian notion of the individual—‘the mind is its own place and his inner life each of us lives the life of a ghostly Robinson Crusoe’, as Gilbert Ryle so deftly described it (1991, 52)—and the notion of personhood that emanates from the more integrated Thomistic metaphysical framework. On this view, a human being is an irreducibly embodied person standing in constant and dynamic relation to their context (including both objects and other persons) in the corporeal world.

Summary

In the Thomistic framework the so-called mind/body problem of the Cartesian framework is non-existent; the very idea that the mind is some kind of a distinct substance that needs to interact with the brain is utterly absurd. From a Thomistic point of view, however, the main problem in the Cartesian framework is not

primarily the conception of the mind, but rather the misconception of *matter* that characterizes a Cartesian mechanistic worldview. The latter excludes formal and final causes from the definition of what it is to be physical, thus leading to an understanding of matter as (nothing but) something fully describable in quantifiable terms. This—by default—casts mental properties as immaterial and *hence* excluded from the causally closed material world. In a Thomistic framework, by stark contrast, there is no good reason to accept such claims that all genuinely material characteristics should be reducible to a single quantifiable term.

Reality, as Aquinas understands it, is not composed out of distinct substances. Instead, he begins from the idea that everything/one shares analogically in the same kind of being. All beings (apart from God) are composites of essences and existence, act and potentiality, and (in the case of material substances) instances of matter and form. In other words, for Aquinas substances are not static things pushed and pulled by merely efficient causality, but rather substances are active and in dynamic relation with everything else. This allows for a more dynamic notion of reality as well as a more integrated view of human nature than the one found in the Cartesian framework. For Aquinas, it is neither the brain nor the mind alone that thinks, but the whole human being as a rational being. The soul is the form of the body, and their relationship is no more fictional or mysterious than the relationship between the shape of a particular dining table and the wood out of which that table is formed. Their relation is simply obvious and undeniable.

5. Buddhism – the ‘New’ and Exotic

During the work on this thesis I had the opportunity to present several papers on both Thomistic and Buddhist metaphysics in various settings. Presenting the Thomistic framework, I found that however interesting I tried to make my first few sentences, the moment I mentioned ‘Aquinas – a scholastic philosopher’ heads would bow. Not in prayer, but because the pull of the smartphone would be too strong. The questions at the end tended to be concerned with relevance – ‘haven’t we already tried that?’ The responses after papers on Buddhist metaphysics were remarkably different. Now people were sitting forward on their chairs, eagerly taking notes and chewing their pen caps. There was a proliferation of questions at the end, but rather than sticking to academic questions concerning metaphysics, there would be questions such as ‘would the world be a better place if everyone become Buddhist?’ or even ‘what does this mean for how I live my life?’

While ‘doing metaphysics’ is not the goal in Buddhist teaching, a true description and understanding of reality features in the teaching as a way of attaining the goal of Nirvana. Hence, there is a lot of metaphysics to be considered in Buddhist teaching – a teaching that of course has not been static since the Buddha articulated it. The understanding of reality and human nature found in the teaching of the Buddha has been developed by his followers in a large number of various schools and traditions, of which the three main traditions are Theravada, Mahayana and Vajrayana. The various schools and sects have developed their understanding of fundamental tenets and practices in every direction. Treating this vast tradition under one heading is obviously somewhat unfair to what is a rich and incredibly diverse tradition of philosophical speculation and reasoning, and therefore obviously not the most clarifying way of doing it. However, considering the minimal engagement with Buddhist philosophy by mainstream contemporary philosophy of mind, giving a generalised account is still very much valuable. In order to remain coherent and meaningful when using the words ‘Buddhist’ and ‘Buddhism’, this chapter will emphasise the general doctrines of Buddhism that most schools agree on, as portrayed by Noa Ronkin (2005; 2010),

Frank Hoffman (1992; 1987), Paul Williams (2000), Rupert Gettin (1998), William Edelgass (2009), S.R. Bhatt (2000), Christian Coseru (2012c) and Mark Siderits (2007; 2011; 2003b).¹²²

This chapter gives an overview of Buddhist metaphysics and theory of human nature. It shows that there are other ways of conceiving reality and human nature, strikingly different to the conception found in the Cartesian framework, and that as a result, the mind/body problem is not an issue on this view. The first section sketches the historical and philosophical contexts wherein Buddhist philosophy emerged. Section two is concerned with Buddhist metaphysics and description of reality. The starting point here is the three characteristics of reality as described in the Buddha's first public sermon *Turning of the Wheel of Dhamma: anicca* or impermanence, *dukkha* or suffering (dissatisfaction), and *anattā* or not-self. Dovetailing these three characteristics are two other fundamental aspects of Buddhist doctrine: the 'theory of Dependent origination' concerning the origin and existence of phenomena both material and mental; and the 'theory of Two truths' concerning conventional and ultimate reality. These will be addressed as they appear in the course of the argument. The third section highlights three areas of Buddhist metaphysics that are of particular interest for this thesis and for a comparison with a Cartesian and Aristotelian framework, namely the view of matter, causation and human nature including the mind and consciousness. The understanding of matter and ultimate reality are captured in one term in Buddhism; *Dhamma* which constitutes both reality itself *and* true teaching about reality. It is both 'prescriptive' and 'descriptive'. That is there is no distinction between reality itself and true metaphysical teachings about reality. True teaching about reality and reality itself coincide entirely. The notion of causation and change as described in the theory of dependent origination places the emphasis on existence in virtue of extrinsic relationships, rather than the intrinsic properties of a phenomenon. In other words Buddhism holds to what one might term a non-substance ontology: human beings are compounds of events, from which the

¹²² For simplicity's sake only Pali terminology is used. However, Sanskrit may appear in direct quotations.

illusion of a continuous ‘self’ emerges. The ‘self’ is neither a substantive nor a nihilistic self, nor the emergent self-as-something. It is ‘not-self.’

In spite of its long history, the philosophical traditions of Buddhism offer what are sometimes considered by Western philosophy as counterintuitive and complex accounts of the mind and mental phenomena. Buddhism has often been too easily dismissed as flawed both methodologically, logically, and emotively, when really it is not.¹²³ Here, some basic knowledge of the historical context out of which the philosophical tradition emerged might help make clear what precisely its aims and motivations were and remain. Also, it is important to note that Buddhist logic is closely connected to its ontology. As a philosophical tradition, rather than being only a matter of abstract problems connected with semantics and analytic truth, it is pragmatically grounded in a particular view of the way things are (Hoffman 1992, 81).

5.1 Context

The teachings of Gotama, the historical Buddha, arose in a specific religious and social milieu—namely within the conceptual framework of the Brahminical tradition—and with a specific aim in mind: the eradication of ‘suffering’ or ‘dissatisfaction’ for all. This means that the Buddha in his teachings is building on and contrasting concepts and ideas that are already present, such as *saṃsāra*; the round of rebirth, *kamma*; action and moral retribution, and *moksha*, liberation’ (Ronkin 2010, 35). For example, his understanding of not-self (see below) is an attempt to find a ‘middle way’ between ‘the Brahmanic eternalist or spiritualist understanding on the one side and the sceptical annihilationist or materialist conception on the other (Yong 2005, 153). This ‘middle way’ was taken to reject both the substantive and the nihilistic self, while affirming the empirical, existential, and functional self of the *khandha*. As Klaus Klostermaier articulates it:

In Buddhism too, as in all other systems of thought with a strongly ethical and practical component, the interdependence of views on nature and views on human destiny is demonstrable. And Buddhism too, as all other religions and philosophies, takes over existing notions of the physical universe and fills them with existential and soteriological meaning (Klostermaier 1991, 29–37).

¹²³ See Hoffman (1987 Chapters 1-3).

The middle path, as described in the *Turning of the Wheel of Dhamma* is meant as a way to ‘insight and wisdom, produces calm, knowledge and enlightenment, and *nibbāna*’ (*Samyutta Nikāya*, V, 420). The middle way is intended to be a guide for ethical living and a primer for correct teachings – in other words, not first and foremost a metaphysical exposition of reality. The Buddha was motivated by his desire to eradicate suffering. Nonetheless, together with the Buddha’s teaching on the four noble truths and eightfold noble path (which are also expanded on in this first sermon), the middle way is an entry point to the Buddha’s understanding of reality – and a rich one at that. So while Buddhist philosophy is grounded on a strong soteriology—a particular diagnosis of what is wrong with the world or the cause of suffering and a prescription of how to return to the ideal state or eradicate suffering—its teachings are deeply concerned with the nature of reality and the dynamics of cognition. The underlying soteriology in Buddhism can be described in the following manner: experience shows us reality is both unity and distinction. At first glance distinctions seem real, but they turn out to be unsubstantial as they are impermanent. Change and flux are the source of pain because of our desire to hold on to things. This is the first and second of the Noble truths: Existence is suffering/unsatisfactoriness and the cause of suffering is attachment. The ideal and ultimate reality is unity; all is one. Apparent permanence in conventional reality is an illusion concealing this truth. The lack of insight is due to the dynamics of our cognitive apparatus (Ronkin 2010, 4). We can break out of the circle of suffering by unveiling the illusion of permanence. This is the third noble truth – the cessation of *dukkha*. Seeing reality and self as impermanent and non-substantial is done by following the eight-fold path as articulated by the Buddha¹²⁴, and gaining insight into the conditions of our cognitive apparatus. This is the fourth noble truth.

¹²⁴ The eight-fold path or the Middle way to *nibbāna* is described in the *Dhammacakkappavattana Sutta*. The Buddha understood liberation in psychological terms, as a transformation of the mind through correct understanding. The aim is to overcome greed, hatred and delusion by striving towards their opposites, nonattachment, loving kindness, and wisdom. The eight elements that are sort after are: 1. right view (pure understanding of the 4 noble truths), 2. right intention, 3. right preaching, 4. right action, 5. right livelihood, 6. right effort, 7. right mindfulness, 8. right concentration. For a lucid overview of the eight fold path. (Gethin 1998, 80–84 Chapter 7).

5.2. Metaphysics

While the Cartesian framework sees reality as a container for persons and substances, the Buddhist framework sees reality as ‘an assemblage of interlocking physical and mental processes that spring up and pass away subject to multifarious causes and conditions...’ (Ronkin in Edelglass and Garfield 2009, 14). In other words, the Cartesian framework operates with a substance ontology, while Buddhism has a non-substance ontology where the emphasis is on process and change. Reality is described in the Cartesian framework in terms of matter and consciousness. In Buddhism, however, ‘the fluctuating world of bare sensory awareness, cognitions (and the entities they disclose) exists only as aggregated phenomena of experience. However, these elements that are constitutive of experience are not simply the counterparts of corresponding physical objects, since what lies outside the sphere of perception is always already constituted by the dynamic structures of our cognitive architecture’ (Coseru 2012c, 66). Ronkin describes the Buddhist metaphysics as

... a framework of thought that hinges on the ideas that sentient experience is dependently originated and that whatever is dependently originated is conditioned, impermanent and subject to change, and lacking independent selfhood. Construing sentient experience as a dynamic flow of physical and mental occurrences and rejecting the notion of a metaphysical self as an enduring substratum underlying experience, the Buddha’s process metaphysics contrasts with substance metaphysics. Process metaphysics has deliberately chosen to reverse the primacy of substance: it insists on seeing processes as basic in the order of being, or at least in the order of understanding. Underlying process metaphysics is the supposition that encountered phenomena are best represented and understood in terms of occurrences - processes and events - rather than in terms of “things”, and with reference to modes of change rather than to fixed stabilities. The guiding idea is that processes are basic and things are derivative, for it takes some mental process to construct things from the indistinct mass of sense experience and because change is the pervasive and predominant feature of reality (Ronkin in Edelglass and Garfield 2009, 14–15).

This section on Buddhist metaphysics will first describe the conception of reality found in Buddhist teaching. The anchor point of its framework is the characterisation of reality as bearing three traits: suffering, impermanence and no-self. Nested in this description of reality are the doctrines of dependent origination and the doctrine of two truths, though they themselves are formulated at a later

stage. When the fundamentals have been laid out, the chapter goes on to explore the Buddhist notion of the material. While in the chapter on Thomistic metaphysics the notion of causality was given a separate section under the heading metaphysics, the Buddhist notion of causation is entwined in the description of reality as the doctrine of dependent origination. The reason for this is that Aquinas sees change as a process *in* reality, while Buddhism sees change as essential to reality itself.

Reality

For Buddha there are three characteristics that hold true of all of reality and being: unsatisfactoriness/suffering (*dukkha*), impermanence (*anicca*) and the lack of permanent self or essence (*anattā*). In order to know suffering one needs to be conscious, thus the first feature of reality is only experience by animate beings. The two latter features of reality are applicable to all, both inanimate and animate existence. Everything is subject to dependent origination and in a constant state of flux. That which is dependent can also not exist 'intrinsically'. Therefore nothing has essence or self. All that exists is no more than variations, like different tones struck on a single chord, which is made up of impermanence, suffering and no-self. To see reality for what it is, is to understand reality in light of these three truths. Seeing these is what constitutes liberating insight (*paññā*), usually translated as 'wisdom'.

This section will first unpack the three characteristics of reality. Then it will look at the two doctrines that are entwined with the view of reality that emerges from its three traits; the theory of Dependent origination and the theory of Two truths.

Dukkha - Unsatisfactoriness

In the following passage from the Pali *Dhammacakkappavattana Sutta* the Buddha claims that absolutely everything that matters to an unenlightened individual is *dukkha*.

Birth is dukkha, decay is dukkha, disease is dukkha, death is dukkha, to be united with the unpleasant is dukkha, to be separated from the pleasant is dukkha, not to get what one desires is dukkha. In brief the five aggregates of attachment are Dukkha (Williams 2000, 42).

There has been much debate as to how best to translate *dukkha* but most commonly it is translated as ‘suffering,’ ‘stress,’ ‘unsatisfactoriness’. It is the first hallmark of existence. The realisation of all existences as *dukkha* leads to the discovery of the root of discontentment and its finality (the second and third noble truths, respectively). The cessation of *dukkha* is the motivation factor of the Buddhist path (the fourth noble truth).

The concept of *dukkha* has come to be understood in three ways in Buddhist tradition. The first is the ‘pain of pain’ (in Sanskrit *dukkhadukkha*), meaning literal pain, including both physical pains such as wounds or headaches and mental states such as sadness and unhappiness. Secondly, *dukkha* is understood as ‘pain of change’ (in Sanskrit; *Viparinama-dukkhata*). Change is inherently unpleasant. Even apparently pleasant and desirable states are subject to change and are therefore also ultimately *Dukkha*. As impermanence is unremittingly part of our unenlightened state, *dukkha* is omnipresent. Finally, *dukkha* is described as ‘pain of formation’ (in Sanskrit *samskara-dukkhata*). Since all things are compounds and conditioned phenomena it follows that they are impermanent and unstable. Hence *Dukkha* is omnipresent and intrinsic to our state or very being. The doctrine of *Dukkha* in Buddhism that *dukkha* is descriptive of all of reality, and so is much broader in meaning than ‘suffering’ or ‘unsatisfactoriness.’ (Williams 2000, 42–43; Coseru 2012c) Rather, it is a concept that marks out ‘the predicament in which man is, bound by conditioned existence in a *samsāric* life.’ (Silva 1979). *Dukkha* is simply a fact of existence.¹²⁵

The origin of suffering is craving (literally *thirst*, Pali: *taṇhā*). The *Dhammacakkappavattana Sutta* articulates it the following way: ‘It is this craving which produces rebirth, accompanied by passionate clinging, welcoming this and that (life). It is craving for sensual pleasures, craving for existence, and craving for non-existence’ (Williams 2000, 44). Traditionally cravings are classified as three types; craving for sensory pleasures, craving for eternal life, and craving for non-

¹²⁵ This stands in sharp contrast to the Thomistic notion of the good, telos and participation.

existence or a 'full stop'. The problem of craving is not wanting per se, rather that craving is a deep-rooted grasping considered to be an instinctive response from birth. It is a thirst that can never be satisfied. In a reality of impermanence 'craving of whatever kind will never be able to hold on to the things it craves'(Gethin 1998, 70). Craving leads to grasping and attachment. In the Buddhist tradition there are four forms of attachment taken from Gethin (1998, 71); 'attachment to the objects of sense-desire, attachment to views, attachment to precepts and vows and attachment to the doctrine of self.' This makes up an all-compassing web of attachment that entangles all beings. Importantly, it is not the object of craving and attachment that is the cause of suffering, although there is a hierarchy of good and bad of the things one might crave and become attached to. The cause of suffering is the craving and attachment itself. Suffering occurs because of the discrepancy between our cravings and the way the world is.¹²⁶ In other words it is;

A fundamental misjudgement of the situation; a judgement that assumes that when our craving gets what it wants we will be happy, that when our craving possesses the object of its desires we will be satisfied. But such a judgement in turn assumes a world in which things are permanent and unchanging, stable and reliable. But the world is simply not like that (Gethin 1998, 73).

Craving, the desire to cling, therefore is part of the reason for the fundamental misunderstanding concerning the true nature of reality.¹²⁷ As reality is impermanent, our clinging to it is inevitable suffering and unsatisfactoriness. *Dukkha* therefore permeates every aspect of our being and existence. The following section will consider the nature of this impermanence.

Anicca - Impermanence.

The second characteristic of reality, impermanence, underpins the doctrines of *dukkha* and *anattā*. Sakka, the chief of the deities, said the following, when the Buddha died:

*Impermanent are all component things,
They arise and cease, that is their nature:
They come into being and pass away,*

¹²⁶ The notion of a 'self' is also born out of a craving and aversion.

¹²⁷ Other features that defile the mind and our understanding of reality according to Buddhism is greed, aversion, and delusion. The overlap and interaction of these three features result in *Dukkha*. As our understanding and misunderstandings all originate in the mind Buddhism spends most of its efforts on the workings of the mind (Gethin 1998 Chapter 5).

*Release from them is bliss supreme.*¹²⁸

Impermanence is the concept that describes all component things, as everything arises as the result of causes and in turn gives rise to effects. This concept expresses the idea that every part of conditioned existence, mental as well as material, is constantly undergoing change. There is an absence of permanence and continuity in the ultimate reality described by Buddhist teaching. While Buddhist analysis of reality leads to basic features such as the five *khandhas*, *āyatanas*, *dhātus* and *dhammas*, none of these are considered eternal substances, but rather as a variety of constantly changing factors. There are no equivalents to the atoms of Democritus that are not subject to de-generation and decay. Impermanence goes ultimately all the way down and ends in emptiness.

Impermanence is normally understood in two senses. First, as 'gross impermanence' which simply states the fact that nothing has been forever and nothing will last forever. Provided the right constellation of causes and conditions all phenomena will arise, during their existence they will age and change until they eventually pass out of existence. The second notion of impermanence is considered to be 'subtle impermanence', which holds that all phenomena do not endure for more than a moment in time. Since to be identical is defined as sharing all properties, nothing retains its identity from one moment to the next. On this level of understanding the apparent stability and continuity that we experience in conventional reality comes not from substances but from the chain of causation and that an effect is dependent on the cause and the convenient designators we use to identify them (Garfield and Edelgass 2009, 4).

This forms the structure of the universe in Buddhism. All phenomena, both physical and mental are combinations of other things coming together as conditioned by previous events. Everything is conditioned, relative and

¹²⁸ *Mahā-Parinibbāna Sutta* (DN 16). In the *Mahā-Sudassana Suttanta* (Dīgha-Nikāya), this verse is ascribed to the Buddha himself; in the *Mahā Sudassana Jātaka* (No. 95), it is ascribed to the Bodhisatta, in his rebirth as King Mahā-Sudassana. In the *Theragāthā* (v. 1159), Mahā Moggallāna Arahant recites it, after mentioning (in v. 1158) the passing away of Sāriputta Arahant that preceded his own only by two weeks.

interdependent. In other words the entirety of reality has been understood by the Buddha as:

...a series of changing moments...The existence series, whether of a physical conglomeration or psychical conglomeration, consists of distinct units of existence that are discrete but not independent. They are rather interdependent on its preceding unit in that series, and likewise every preceding unit in the series, in order to be real, has to give rise to its succeeding unit (Bhatt and Mehrotra 2000, 2).

As seen here, when expanding and explaining the idea of impermanence another Buddhist doctrine arises; namely the idea that nothing comes into existence or exists independently as a distinct unit. This doctrine is known as 'Dependent origination' or 'Dependent arising'. Paired with this teaching is the understanding of causal dependence – known as Causal efficiency. The notion of impermanence is also integral to the 'theory of Momentariness', which holds that phenomena do not endure for more than a moment in time. These Buddhist doctrines concerning causation need to be understood in light of the Vedic and the Brahmanical tradition as they build on and rearrange concepts in their frameworks. Three concepts which are particularly central are *saṃsāra*, the notion that existence is trapped in continuous rebirth, which is a state of suffering; *kamma*, the notion that the process of rebirth is determined by moral actions in an impersonal and law-like manner; and *moksha*, the idea that it is possible to free oneself from the round of rebirth and this is the ultimate goal. With these three features in place, any account of the universe must be one that allows for the possibility of liberation, and events and actions must be in causal relation to each other. Further causal relations that are important to achieving liberation become primary. As mentioned at the very beginning, the starting point for the Buddhist account of reality, including causation, is the human experience of suffering due to *saṃsāra*, rather than fascination with i.e. mathematics (Ronkin 2005, 194). The concepts of causation contemporary to the Buddha were all founded on substance ontologies. The understanding of reality as made up of 'things' that are ultimately unchangeable and carriers of certain properties and characteristics, resulted in a view of causal relation as:

...a binary function of 'cause' and 'effect', and that it had a sense of production. A cause is that which produces something and in terms of which

the product, its effect, can be explained. Causes and effects are thus changes in the states of substances, and causation is an invariable relation between the characteristics of those substances: whenever a substance occurs with the characteristic x, it produces a substance with the characteristic y (Ronkin 2005, 198).

Like the notion of *dukkha* the notion of impermanence is omnipresent, it permeates everything: these are central tenets of Buddhist metaphysics. The notion of dependent origination and its implications will be returned to below, after a consideration of the third and final characteristic of reality; not-self.

Anattā - Not-Self

Anattā is the theory of not-self or no-essences. This theory pervades everything, even consciousness, which is normally taken to be continuous with the notion of self as a prominent quality. Compared to most of modern Western philosophy, the Buddhist view offers a radically different account of human existence: what we commonly call 'I', ego, self, soul, person, individual, are seen as merely conventional terms: they might well have a pragmatic use, but they do not refer to anything real. From a metaphysical point of view the not-self doctrine is applied as mentioned to everything. It is not just persons that are said to be selfless, but all elements of existence. This stands in stark contrast to the Aristotelian/Thomistic account of forms and essences.

The theory of not-self is entwined with the understanding of impermanence. As everything is in constant flux there is no permanent self or essence that withstands change. Furthermore, as everything is dependently arisen and made up of compounds there is no part of any particular thing, which that thing *is*. This is what makes Buddhism a non-substance ontology. The doctrine of selflessness is not an outright denial of self, but 'a persistent undermining of any attempt to take anything as "self", and thus be attached to it' (Harvey in Garfield and Edelgass 2009, 267). In considering the doctrine of not-self one quickly stumbles into a language of conventionally real and ultimately real. This is the doctrine of two truths. This chapter will expand on this notion in the following sections.

The following parables are intended to show that there is no such thing as a

permanent self:

A king, enticed by the sound of a lute, asks his servants to bring him the sound. They bring him the lute, but the king exclaims 'away with the lute. I want the sound.' The servants try to explain; 'this thing called a lute is made up of a great number of parts...it makes a sound because it is made up of a number of parts, that is box, strings etc.' The King then takes the lute, breaks it up into smaller and smaller pieces, and throws it away. The moral is drawn; in this way, monks, a monk investigates the constituents of personality...but for him there is no 'I', 'mine' or 'I am' (Collins 1982, 101).

A similar point is made in the Parable of the Chariot found in the *Milindapanha*.

Dating from around the first century C.E., the text is written in the form of a conversation between a Bactrican-Greek king, Milinda and the Buddhist monk Nagasena. The following translation is taken from Harvey:

Then the venerable Nagasena spoke thus to King Milinda: 'You, sire, are noble, delicately nurtured...Now, did you come on foot or in a conveyance?' 'I, Venerable sir, did not come on foot, I came in a chariot.' 'If, sire, you came by chariot, show me the chariot. Is the pole the chariot, sire?' 'Are the wheels... the body of the chariot, the flagstaff, the yoke, the reins, or the goad the chariot?' 'O no, venerable sir.' 'But then, sire, is the chariot the pole-axle-wheels-body-flagstaff-yoke-reins-and-goad?' 'O no, venerable sir.' 'But then, sire, is there a chariot apart from the pole-axel-wheels-body-flagstaff-yoke-reins-and-goad?' 'O no, venerable sir.' 'Though I, sire, am asking you repeatedly, I do not see the chariot. Chariot is only a sound, sire. For what here is the chariot? You sire, are chief raja of the whole of India. Of whom are you afraid that you speak a lie?'... 'I, venerable Nagasena, am not telling a lie, for it is dependent on the pole, dependent on the axel [and other parts]... that "chariot" exists as a denotation, appellation, designation, as a current usage, a name.' 'It is well; you sire, understand a chariot. Even so it is for me, sire, it is dependent on the hair of the head, and on the hair of the body...and dependent on the brain in the head, and dependent on material form, and on feeling, on perception, the constructing activities, and dependent on consciousness that "Nagasena" exists as a denotation, appellation, designation, as a current usage, merely as a name. But according to the highest meaning, a person is not apprehended here' (Harvey in Garfield and Edelgass 2009, 273–274).

Nagasena's point there is that we use linguistic terms such as 'chariot' and 'Nagasena' to identify complexes that are important to us on a conventional level. These complexes are not ultimately real as they are only composite substances of which none of the parts constitute their essence. The 'I' or 'the self', pronouns and proper nouns are convenient designations for a causal series of sets of impermanent *khandhas* which make up a human person.

The doctrine of not-self is so central to Buddhist metaphysics because it is the core of the contemplative strategy to induce a letting go of everything in *nibbāna*. The long lists of different kinds of consciousness, or endless categorisation of aspects of reality are not in and of themselves attempts to describe reality as it ultimately is, but precisely to analyse (literally *pick apart*) any illusion of substance. The chariot is picked apart, and no chariot is found. The lute is picked apart, and no sound is heard. The analysis is, in other words, utterly ‘deconstructive’. It never tries to ‘save the appearances’ of the chariot or the sound. Neither does it dismiss either as simply ‘false’. Its aim is rather to break the habit of confusing conventional truth with ultimate truth. Ronkin makes this point in regard to the long and various list of *Dhammas*:

Dhammas list are not to be read as a catalogue instructing us about the ultimate entities we would come across as inhabitants in the world. Rather the lists are to be meditated upon and hence revealed to act out the idea that there are no ultimate, irreducible entities, because all experienced phenomena - their constitutive dhammas inclusive- are always reducible to other phenomena upon which they depend for their occurrence and are always amenable to further division (Ronkin 2005, 145).

While it is possible to talk about selves, persons, and objects in conventional reality, ultimately there is no-self or stable core.¹²⁹ This is the third feature of reality as described in Buddhism. Together with the concepts of suffering and impermanence, it lays the foundations for understanding reality – a reality that is made sense of in terms of the doctrine of Dependent origination and Two truths. The final part of this section considering Buddhist metaphysics will probe these two doctrines. That will set us up for taking a closer look at the view of human nature found in the last component of this chapter.

Dependent Origination – the Nature of Causation.

Everything, including all mental events, occurs as a result of a multitude of causes and conditions. Dependent origination accounts for

reality as incessant change in terms of the causal and dependant origin of the

¹²⁹ For Nāgārjuna the ultimate truth was that there was no ultimate truth and we are simply left with the world of conventions, or the conventional world. Moreover, that world was ‘empty’ (Skt: *śūnya*, Pali: *sūñṇā*) of ‘intrinsic existence’).

succeeding from the preceding unit in the series. The experience of permanence in the series is also explained on the basis of continuity and dependence. The real is always changing, but the change is not random; it is causally regulated' (Bhatt and Mehrotra 2000, 63).

In other words, it is the description of sentient experience as made up of causal relations 'between ordered successions of physical and mental processes, [and] not their inherence in some substrate' (Ronkin 2005, 199).

This doctrine is normally portrayed as 'three-dimensional'. The first aspect of it is the one of causes and conditions. Everything arises as a result of a multitude of causes, which themselves are results of previous causes making up a causal web rather than a linear single chain of causation. The second is one of synchronic interdependence between any whole and the parts in which it consists. Any complex whole, such as a human being, is dependent on its parts, e.g. the heart, lungs and skin, for its/his/her existence. Equally, any part has its characteristics in virtue of the whole to which it is a part. Without the whole the parts would not exist. The third dimension holds that there is no intrinsic identity of entities that exist in time and space (i.e. Conventional reality). This is akin to the notion of a third feature of reality – non-self. Everything we identify as a thing, including our selves, depends on a conceptual designation for that identity. The only thing that makes a table a table is a convention that collects four legs and a top into a single entity as a referent from the word 'table' (Garfield and Edelgass 2009, 9).

Dependent origination is important to the Buddha because it 'indicates a rational coherent structure of the universe' (Williams 2000, 63). This structure in turn allows a path out of suffering by reversing the process of *saṃsāra*, which he uncovered to be a twelve-step process.¹³⁰ Each link in the chain of suffering ceases, through the cessation of the preceding link:

¹³⁰ The full formula for dependent origination (taken for convenience from the Pali version in *Samyutta Nikaya* II: 12:1; cf. (Gethin 1998, 141–142)) is as follows: *Conditioned by (i) ignorance are (ii) formations, conditioned by formations is (iii) consciousness, conditioned by consciousness is (iv) mind-and-body (nama r pa), conditioned by mind-and-body are (v) the six senses, conditioned by the six senses is (vi) sense-contact, conditioned by sense-contact is (vii) feeling, conditioned by feeling is (viii) craving, conditioned by craving is (ix) attachment, conditioned by attachment is (x) becoming, conditioned by becoming is (xi) birth, conditioned by birth is (xii) old age and death.*

With the cessation of his relishing, cessation of clinging; with the cessation of clinging, cessation of being; with the cessation of being, the cessation of birth; with the cessation of birth, ageing and death cease, and also sorrow and lamentation, pain, grief and despair; that is how there is cessation to his whole aggregate mass of suffering. (Mahatanhasankhaya Sutta Trans. Ñāṇamoli 1992, 255)

The concept of *saṅkhāra* literally means ‘formations’ or ‘that which has been put together’. One understanding of *saṅkhāra* is as a designation of all conditioned, constructed or composed things. *Saṅkhāra* are part of the twelve-fold formula of Dependent origination and as one of the five aggregates that make up a human person. *Saṅkhāra* are one of the five processes that constitute human experience. All things, events and phenomena are *saṅkhāra* or ‘formations’ and are characterised as *dukkha*. They are impermanent and therefore subject to change according to the karmic forces. Thus, in another sense, *saṅkhāra* can be understood more actively as part of ‘the karmically active volitions responsible for generating rebirth and thus sustaining the onward movement of *saṃsāra*, the round of rebirth and death’ (Bhikku Bohi 2011). To have a correct understanding of *saṅkhāra* is to understand reality or *Dhamma*. Since the emergence of suffering is a result of direct, impersonal, law-like causes, suffering can be ended – not by sacrifice or petitions, but by removal of the causes.

The law-like feature of causation is *Karma*. In the Brahamical tradition *karma* is seen as the notion that every action produces suitable results. The Buddha however, redefined *kamma* to be an intrinsic, psychological process, namely intention. As quoted in Ronkin:

‘It is intention,’ the Buddha says, ‘that I call Kamma. Having intended, one preforms acts by body, speech and mind.’ The focus is then shifted from ritual to intrinsic psychological processes. The Buddhist understanding of causal conditioning or dependent origination is therefore concerned with the workings of the mind rather than with the mechanics of the world; the emphasis is on how certain kinds of mentality that condition the ways in which one thinks, talks and behaves, shape and determine one’s course of life and one’s relation to the environment (Ronkin 2005, 200).

This also means that ‘Dependent origination’ is an abstract principle of causation trying to account for the metaphysical nature of things. This doctrine of dependent

origination and the twelve fold process coming into existence shows the Buddhist metaphysical commitment to a view of change and continuity that is based on causal connectedness between impermanent processes. Change is not seen as something that happens to secondary qualities of immutable substances. Rather it is integral to the very nature of reality. This idea 'exemplifies that the notions of continuity and identity are meaningful, although they do not imply the existence of any metaphysical principle that makes encountered phenomena continuous and identifiable' (Ronkin 2005, 201). All phenomena are conditioned and dependent. This understanding of causation as experiential processes reconstructs the very terms 'cause' and 'effect' as mere constructs that arise conditioned by the cognitive process by which we understand all of the parts of our experience.

The *Nikāya* notion of causation is remarkably different from its contemporary doctrines of causation. First, rather than analysing the production of entities it accounts for the arising and ceasing of psycho-physical processes. Second, instead of physical causality it centres on the idea of *kammic* connectedness by mental conditioning. Third, instead of a binary portrayal of the causal relation as holding between a single cause and a corresponding single effect, it regards this relation as a manifoldness of supporting conditions: a group of interacting factors, individually necessary and jointly sufficient for setting off processes, none of which is the cause for the arising of those processes. Finally, it substitutes for the relation of causal determination that of *kammic* implication. This is evidenced in the above mentioned succinct verse formulating the principle of causation:

This existing, that comes to be; from the arising of this, that arises; this not existing, that does not come to be; from the cessation of this, that ceases.' The formula by no means states that 'a causes b'. Rather, the arising of x implies the presence of y, and by the same token, the cessation of y is implied by the absence of x. The meaning, then, is framed in hypothetical terms: if y arose, then x had necessarily been present, whereas if x had ceased, then y was necessarily eliminated. In this context, Sue Hamilton remarks that in order to understand this formula accurately, 'one has to see it not in terms of causation but of origination', which means that 'dependent origination is not stating that a will cause b, but that b occurs because there was a. Further, to grasp the mechanics better one needs to see it in the even looser sense that if there is a b, then there must have been an a' (Ronkin 2005, 206).

From the Buddhist perspective all encountered phenomena that constitute our experience in *saṃsāra* are dependently originated precisely because our cognitive process conditions them. Dependent origination as a principle of causation does not depict what things are as given in an external, mind-independent reality, but reveals the mechanics of our cognitive apparatus, and hence it cannot be a deterministic law, although it may be universally valid (Ronkin 2005, 207).

Further, Dependent Origination ‘demonstrates how rebirth can occur without recourse to any self’ (Williams 2000, 63). The previous consciousness becomes one of the contributing causes when a new creature comes into being. The consciousness in the new person is therefore neither identical nor completely other from the one of the deceased being, but they are both parts of the same continuous chain of causation.

This understanding of the impermanence of all mental and physical phenomena is elaborated in the theory of momentariness, which divides

...phenomena temporally by dissecting them into a succession of discrete, momentary events that pass out of existence as soon as they have originated. As one event is exhausted, it conditions a new event of its kind that proceeds immediately afterwards. The result is an uninterrupted, flowing continuum of causally connected momentary events. These succeed each other so fast that we conceive of the phenomena they constitute as temporally extended (Ronkin 2005, 59).

The question then arises as to what is a ‘moment’. The various Buddhist traditions have different answers to this, but one commonality will be that a moment has an arising, endurance and dissolution.¹³¹ The endurance moment also gave rise to a lot of problems as it seems at odds with the commitment to non-substance ontology, as the moment of endurance, and its changing, seems to imply a numerical difference and a substitution of the old identity with a new. This has been expanded in various ways in different Buddhist schools in their understandings of *Dhammas*—the ultimately basic elements of reality. I will return to this in the section on matter below. The important thing to note here is that the

¹³¹ For more on this, see (Ronkin 2005 Chapter 2).

theory of momentariness is not primarily concerned with existence within time, nor the passage of time, but rather our experience of it; the emphasis is on epistemology, not ontology. In the words of Ronkin:

This doctrine does not analyse time in line with classical Newtonian physics as a transcendental category, seeing time as a matrix of order imposed on natural events from without, or as a static container that sets the stage on which such events must play themselves out. Rather, time is itself but an inherent aspect of the manifold patterns of causal conditioning by which physical and mental events interrelate; it is an event-constituted, inherent feature of the structural operation of psycho-physical events (Ronkin 2005, 67).

Impermanence is one of the main traits of reality. But our experience tells us this constant change is not random or disjointed. Change is causally regulated as described in the doctrine of dependent origination and in the notion of *kamma* and *saṅkhāra*. Everything arises as a result of a multitude of causes and goes on to cause other events –making up a web of causation. The fact that things are causally linked gives the illusion of permanence that we experience. Reality itself is intrinsically in permanent flux. It is this paradox that is addressed in the next section concerning the ‘doctrine of Two truths’.

Theory of Two Truths

Early in the development of Buddhist thought, the distinction between conventional reality/truth (*sammutisacca*) and the ultimate reality/ truth (*paramatthasacca*) became part of the discourse. The distinction implies that there are two ways of understanding the notion of ‘real’ or ‘reality’: reality as we experience it - conventional reality and reality as it fundamentally is - ultimate reality. Conventional truth is the realm of persons, tables, chairs, bread, trees, atoms, and cats. Conventionally, objects exist, endure and have a whole range of interesting properties. It appears to us that objects exist and endure, but ultimately they are empty, ‘existing only as impermanent, conventional designations’ (Garfield and Edelgass 2009, 9). It is ‘knowledge of the conventional truth informs us how things are conventionally, and thus grounds our epistemic practice in its proper linguistic and conceptual framework’ (Thakchoe 2011).

This first truth of reality conceals the second truth of ultimate emptiness. The deception lies not in the fact that conventional truth appears to be real and is not, but that it appears to be *ultimately* real - which it is not. Knowing the ultimate truth tells us 'how things really are ultimately, and so takes our minds beyond the bounds of conceptual and linguistic conventions' (Thakchoe 2011). There is no deception in ultimate truth. There all is one. It is the key to *nibbāna*. Those who do not understand the distinction between them would not see the path to liberation. This is because conventional truth is the entry point to understanding the meaning of the ultimate reality and without understanding ultimate reality- *nibbāna* is not achieved. The theory of two truths is the Buddha's attempt to find a middle way between the error of nihilism and taking things that exist conventionally to exist ultimately. The relationship between conventional truth and ultimate truth according to the Pali tradition, for instance, is a sort of mereological reductionism: 'apparent wholes are conventional truths; the fundamental psychophysical entities in which they ultimately consist are the ultimate truths' (Garfield and Edelgass 2009, 10).

There are two main traditions of understanding the two truths. In the Yogacāra school conventional truth is taken to be a cognitive projection. All conventional phenomena are taken to be nothing but aspects of consciousness. Their ultimate truth is that they are empty of any external existence. They are idealists in the sense that they deny the existence of the external world and the reality of the mind becomes the foundation for illusion and the platform for awakening.

The Madhyamaka tradition as articulated by Nāgārjuna, does not view external reality in the same way. Nāgārjuna too, however, strives to develop a middle path between a realism that takes real phenomena to be ultimately existent in virtue of being actual, and a nihilism that takes all phenomena to be non-existent in virtue of being empty. Instead, he argues that reality and emptiness are coextensive.¹³² The mind and external reality are equally empty. He argues that Dependent origination

¹³² 'Emptiness' in Buddhist logic is referred to as a 'non-affirming negative'. Which means that it negates something about reality i.e., 'intrinsic existence' without suggesting its actual mode of being, which can only be experienced not spoken about. *Madhyamaka* as formulated by Nāgārjuna is anti-ontological and is meant to bring about an end to philosophising.

and emptiness are identical. To exist dependently is to be empty of essence – what gives the appearance of existence is the causes from which the phenomena have arisen. Existence is in virtue of extrinsic relationships, not intrinsic properties. As all phenomena are interdependent, all phenomena are empty in the sense that there is no intrinsic essence by which they can exist independently. This implies that conventional and ultimate truths are identical too as they both are empty. Emptiness is not to be non-existent; that is, in a Buddhist context, ‘reality is not empty of *existence*, but it is empty of *inherent existence*, or of *essence*’ (Garfield and Edelgass 2009, 5).

As we have seen, at the heart of a Buddhist view of reality is the understanding ‘that all phenomena are impermanent, without essence (or selfless), and interdependent’ (Garfield and Edelgass 2009, 4). Conventional reality—that is, reality as we experience it—is not a container for persons and substances, but an interlocking network of physical and mental processes that arise and fall away as a result of various causes and conditions. The experience of permanence is seen to be a conceptual superimposition. Ultimately, reality is empty and ‘all is one’ or a pregnant nothing which is better understood as a unified pluralism, than a static monism. This is a strikingly different framework than the Cartesian and Thomistic framework, providing us a distinctly different view of reality. When reality is conceived of in this fashion, a radically different understanding of the ‘physical’ follows, as we will now see.

The Material

In the Cartesian framework, matter is considered a fundamental substance with sensible properties, and separate from the mental substance. The two substances together make up reality. Materialism, as defined by its Cartesian roots, sees reality as purely material. Furthermore, matter is part of what individuates a thing. Hence, Western philosophy tends to think of the world as comprised of particulars and the world’s history as a linear sequence of particular events involving particulars, and we believe these particulars and events are included in our common discourse, as things we can identify and talk about. And this is what makes up reality.

For Buddhism, by contrast, matter (*rūpa*) is neither a primary metaphysical substance, nor does it constitute reality (*Dhamma*) as it ultimately is. *Rūpa*, like all aspects of reality is understood in light of Dependent origination and the theory of Two truths is one of several components of conventional reality, but it is not ultimately real. Conventional reality, as the realm of reality in which things arise, exist and die, is expanded on in the Abhidharma systems and is part of understanding concerning the Buddhist cosmos. As Gethin (1998) describes in chapter 5 on the Buddhist Cosmos, Buddhism sees the limits of the temporal and spatial dimensions of the universe as undeterminable. The doctrine of *saṃsāra* (the round of rebirth) points to no-beginning. While the doctrine concerning the hierarchical realms of various *devas* or ‘gods’ shows that the world consist not only of people but; ‘its gods, its Mara and Brahma, this generation with its ascetics and Brahmins’ (Gethin 1998, 114). Further, other Buddhist text tells us:

there is not only one such world with its gods, its Mara and Brahma; in fact the universe as a whole comprises a number of ‘world-spheres’ or ‘world-systems’ each with its god. Clusters of a thousand ‘world-spheres’ may be ruled over by yet higher gods, called Great Brahma, but it would be wrong to conclude that there is one final overarching Great Brahma (Gethin 1998, 114).

According to the Buddhagosa in the *Atthasālini* (‘Providing the Meaning’) there is no spatial limit to the extent of the world systems. The Buddha’s answer to the monk Keveddha’ question concerning the boundaries of the four elements earth, fire, wind and water, was that ‘the four elements only ceased completely in the consciousness that knows nirvana’ (Gethin 1998, 114).

While Buddha himself does not give any systematic account for the Buddhist doctrine of the nature of the cosmos, he does provide principles and detail that have later been systematised by the Abhidharma traditions into a coherent whole.¹³³ One important thing to bear in mind is that the Buddha was not interested in giving a full inventory of reality and its parts; his aim was to understand sentient experience and the mind, as this is where he identified the importance to lie. To give a complete overview of Buddhist cosmology is outside of

¹³³ For more on Buddhist cosmology, see (Gethin 1998 Chapter 5).

the scope of this case study, which will be limited to the basic entity of reality known as *dhammas*. The crucial thing to note is that even though this is presented as an elaborate cosmology and categorisation of existence, ultimately all is impermanent, interdependent, and not-self. Not even *dhammas* are ultimately real or enduring.

Dhamma

The context for understanding *Dhamma* is the three characteristics of reality; suffering, impermanence and non-self, as well as the doctrines of two truths, dependent arising, and momentariness and emptiness. *Dhamma* is a multifaceted term with two main meanings. Firstly, *dhamma* is that 'which is the basis of things, the underlying nature of things, the way things are; in short, it is the truth about things, the truth about the world' (Gethin 1998, 35). Secondly, it is also the way one should act. In other words *dhamma* is both descriptive and normative. Ronkin articulates the ambiguity around the meaning of Dhamma in the following manner:

Dhamma signifies both the way the universe is ordered and the way it ought to be ordered, thus blurring the distinction between fact and value. In due course the term dharma has become demonstrably beyond simple translation, conflating reality, the way things are, law, cosmic order, (caste) duty, righteousness, prescribed conduct, religious merit and truth in general all rolled into one (Ronkin 2005, 35).

The Buddha's teaching (*Dhamma*) was primarily concerned with lived sentient experiences. As explained by Ronkin the Buddha has several ways of analysing sentient experience; 'in terms of physical and conceptual identity (*nāma-rūpa*), in terms of the five *khandhas*, in terms of the twelve sense spheres or *āyatanas* and in terms of the eighteen elements of cognition or *dhātus*' (Ronkin 2005, 42). The Abhidhamma builds on the last three and attempts to systematically articulate the underlying structure of consciousness and what constitutes it in a systematic and coherent way; the *dhamma* theory. It does this by 'explicating the nature of all types of physical and mental events that make up one's conscious world, as well as that of their relationships and interrelationships of causal conditioning' (Ronkin 2005, 1). These fundamental physical and mental events are called *dhamma*.

Gethin defines *dhammas*¹³⁴ as ‘an ultimate “event” or “reality” that in combination with other ultimate events or realities, constitutes the basis of reality as a whole’(Gethin 1998, 141). In Ronkin’s words ‘the term *dhamma* refers to those items that result when the process of analysis is pursued to its ultimate limit, until it is not amenable to further analysis. In other words, *dhammas* are here the most basic, and in this sense ‘atomic’, physical and mental phenomena that make up one’s experience, and in this sense one’s world’(Ronkin 2005, 46). This might, for someone coming from a Cartesian framework sound like reality takes place in the mind, akin to the idea of a Cartesian theatre. This is not the case as on the Buddhist account there is ultimately neither a ‘theatre’ where such a viewing of reality could take place, nor is there any coherent being, consciousness or self that watches.

The relationship between *Dhamma* and *dhammas* can be described the following way:

Dhamma is the way things ultimately are; it is also the Buddha’s teaching since this is in accordance with the way things ultimately are. Physical and mental events are the ultimate building blocks of the way things ultimately are; thus to understand the Buddha’s teaching and see Dhamma is to see things in terms of dhammas (Gethin 1998, 209).

It is important to bear in mind here that “ultimate” does not refer to reality extended in space and time, but to reality as understood in the three characteristics of reality and the two truths doctrine.

The numbers of *dhammas* or types of events are more or less limited, and they are divided up and counted differently by different traditions. The following is based on the Theravadin analysis, which holds to 82 classes of *dhamma*. All, but one, of these *dhamma* are conditioned. When combined together in different ways they make up the entirety of the conditioned world of *saṃsāra* from the lowest hell to the greatest Brahma. The final *dhamma* is unconditioned and is *nibbāna*. There are three categories of conditioned *dhamma*, namely consciousness (*citta*), associated

¹³⁴ As Ronkin (2005 Chapter 2) points out while the leading technical understanding of *dhamma* is ‘as a basic, irreducible and ultimately real element constitutive of encountered phenomena’. The conception of *dhamma* as an irreducible entity or ontologically basic is not clear in the Pāli canonical *Abhidhamma*. For a full discussion on the *dhammas* see (Lamotte 1988, 593) and (Hirakawa and Groner 1990, 139).

mental factors (*cetasika*), and physical phenomena (*rūpa*). The first, consciousness, is just one class of *dhamma*, while the other categories divided into further subcategories. Associated mentality is made up of 52 types of *dhamma*, while physical phenomena are divided into 28 classes of *dhamma*. All *dhamma* are defined by particular characteristics (Gethin 1998, 210). The first two categories of *dhamma* will be addressed in the account of human nature and the mind below. The following section, however, will turn to the category of physical *dhammas*.

Material Dhammas

Ontologically speaking, the Buddhist notion of matter as we find it in the Abhidhamma analysis holds that material reality is made up of four primary elements, but it does not define the nature of material phenomena other than that they emerge from the elements. The focus here is not on material phenomena per se, but on the ways that we experience material phenomena – hence, epistemological rather than ontological. Hence, this is not an account of matter as external, mind-independent reality. It is a description of how it appears to the various types of consciousness, showing that all occurrences of matter in ‘all possible states other than sound has eight components; four elements and four types of sensible phenomena (form, odour, taste and touch)’ (Ronkin 2005, 57). Sound has the additional type of sound.

All physical events are analysable into the 28 types of *rūpa-dhamma*. There is no concept of matter outside of this category and even this category is ‘but our own mental construction’ (Ronkin 2005, 48). While the *dhammas* are theoretically seen as separate entities, they do not occur separately, but always in constellations with other *dhamma*. Within the category of *rūpa-dhamma* there are two sub-categories. First, primary *rūpa-dhamma* (*mahābhūta*), which are the elements of earth, fire, air and water with the corresponding characteristics of solidity, heat, mobility and fluidity. These ‘unitary atoms’ are ‘partless and without dimensions; [they] never [spring] or pass away in isolation, but [are] combined with other unitary atoms’ (Ronkin 2005, 56). A group of atoms that come in to existence and cease to be at the same time are ‘a collective atom’. These, then, are part of the secondary *rūpa-dhamma* (*upada-rūpa*). They are dependent on the primary *rūpa-dhamma* and

consist of those material parts that are made up of the four primary elements.

There are 24 such collective *dhamma* listed:

The first five physical sense faculties and the first four corresponding sense objects (excluding tangibles); three faculties (femininity, masculinity, material faculty of life); two modes of self-expression (bodily and vocal); three characteristics of matter (lightness, plasticity and pliability); four phases of matter (integration, continuity, decay and impermanence); the space element, nutriment and the heart basis (Ronkin 2005, 48).

As is evident from the list of what is categorised as *rūpa*, the term is used with a large degree of flexibility. It does not only denote elements of matter, but characteristics and modes connected with matter. These secondary bundles of *dhamma*, arise at the same time as the primary ones, but they are the parts that 'describe how material phenomena are perceived through our senses' (Ronkin 2005, 56).

In Buddhism, matter is thus understood in the context of conventional reality or, in other words, mind-dependent experience. All types of experience 'can be analysed into events each one of which will be an instance of one or other of the eighty-two classes of dhammas' (Williams 2000, 90). So, for example, material objects are made up of some combination of earth, air, fire, and water *dhammas*. However, as has been mentioned, material *dhammas* are not little bits of material stuff. Rather, *dhammas* could be understood as particular properties, or what contemporary analytic metaphysicians might call *tropes* (cf. Goodman 2004). Thus, for example, an earth dharma is a particular instance of solidity and a water dharma is a particular instance of fluidity. The *dhammas* combined in different ways result in what appears to be objects. In addition, *dhammas* are causally efficacious events or occurrences. Finally, *dhammas* are momentary, lasting only long enough to be causally efficacious. On the substantialist account of objects, objects are substances in which properties inhere. Further, on the substantialist account of change, one and the same substance endures through time, gaining and losing properties, but in the Buddhist view, objects are simply bundles of *dhammas* and the *dhammas* do not inhere in a substance at all. The Buddhists obviously cannot appeal to enduring substances to account for identity through change. Rather, change is accounted for in terms of causally integrated series of momentary *dhammas*. The *dhamma* theory

shifts the focus from substances to processes as the main explanation of reality and matter. In regards to the mind/body problem there is no interaction problem or problem of emergence: the 'physical' and 'mental' are not seen as opposing substances, but ontologically belong in the same category of *dhammas* defined by their causal relations. The following examines how *dhamma* theory is entwined with the Buddhist understanding of human nature and the mind.

5.3. Human Nature

The Buddhist theory of human nature emerges from the three characteristics of reality, the theory of two truths and the *dhamma* theory. The understanding of a person in Buddhism arises as a critique to its contemporary idea of *atta*, found within a class of literature known as *Upani ad*, 'I' as an unchanging, immortal constant underpinning all the different and changing experiences, that is beyond suffering. The Buddhist approach to human nature and questions surrounding personhood is through a descriptive analysis of experience. Therefore its account is phenomenological and pragmatic in nature; there is no self apart from experience. There is no permanent ontological substance as in the Cartesian view of the self. Rather, the notion of 'I' or 'self' is understood as a convenient designator appropriate in conventional reality, but not ultimately real. The person is seen as 'a conceptual imputation based on a constantly changing continuum of psychophysical processes' (Garfield and Edelgass 2009, 261). In accordance with *dhamma* theory, the analysis of personal experience is an account in terms of five aggregates of physical and mental events. As they are all in the same strata of ontological category—namely *dhammas*—there is no equivalent of the mind/body problem per se in the Buddhist view of human nature. This makes Buddhism a significant option to consider as an alternative to the Cartesian framework.

The framework for understanding human nature and the individual—impermanence, no-self and the doctrine of two truths—causes a sort of dual-vision that can make the Buddhist account of human nature seem somewhat blurry. It is blurred even further by the fact that the five *khandhas* is not the only way of analysing a person. As Gethin points out there are a number of ways in which the person might be understood:

The individual as comprising twelve 'spheres' (āyatana): the six senses (five physical senses and mind) and the six classes of object of those senses; a variation of this talks of eighteen 'elements' (dhātu): six senses, six classes of sense object, and six classes of consciousness (Gethin 1998, 140).

In short what it is to be a human being comprised of mental and physical components can be categorised and analysed in a number of different ways. The aim is to show that the physical and mental events work in relation to each other and are completely entwined. The long list of different kinds of consciousness, or endless categorisation of aspects of reality and persons also serve another aim, the analysis is meant to literally pick apart any illusion of substance. As seen in the parable of the chariot and the lute in the section concerning 'Not-Self' above, the analysis is utterly 'deconstructive'. It does not try to 'save the appearances' of the chariot or the sound. Neither does it dismiss either as simply 'false'. Its aim is rather to break the habit of confusing conventional truth with ultimate truth.¹³⁵

This again highlights that the aim of Buddhist metaphysics is not to give a description of the physical reality as such, but has underlying soteriological commitments. Abandonment of the unchanging essential self is necessary for the attainment of liberation. With this in mind I will now go on to look at two of the ways a person is understood in Buddhist metaphysics, namely as a compound of *nāma-rūpa* or as a compound of five *khandhas*.

The Compound Nature of Humans

Buddhist metaphysics refers to human beings as *nāma-rūpa* (name and form). *Nāma-rūpa* refers to the whole psycho-physical organism, which constitutes a person as a separate and distinct individual. The mental and physical are here seen as constantly interacting. As Winston King says:

at any given moment of experience, body mind represents an intimate organic unity. For though Buddhism recognises a polarity between mental and physical constituents of sentient beings, it never sharply divides them but on the contrary strongly emphasises the close relationship of all mental and physical states (King 1964, 19, as quoted in Harvey 1993, 29).

¹³⁵ Cf. quote by Ronkin concerning the various lists of *dhammas* on p. 160.

The interdependence of *nāma* and *rūpa* is described by commentator Buddhagosa as like the relationship between a blind man (*rūpa*) who carries an immobile cripple (*nāma*) on his shoulders: together they can prosper. That is, *nāma* (the mental part), on its own lacks efficient power, for it does not eat, speak or move; similarly *rūpa* (the physical part) lacks efficient power on its own, for it has no longing to do such things (Harvey 1993, 33). The *nāma-rūpa* is further analysed to consist of five *khandhas* and the existence of a specific person is no more than the five *khandhas* arranged in the right way. The five *khandhas* are form (*rūpa*), which denotes the physical world as experienced by a conscious being; feeling (*vedanā*); conceptualisation/perception (*saññā*); volition/mental formations (*saṅkhāra*); and consciousness (*viññāṇa*).

Collectively the five *khandhas* are seen as constructed or conditioned, impermanent and without essence of self. None of the five are identified as the 'self' or as the 'core' of the person. There are three main arguments or intuitions that deny the notion of permanent self. The first one is that all the aggregates and their constellation are seen to change from moment to moment. The second is that none of the aggregates can be the self as none of them can exercise control persistently. Any influence over the aggregates is limited, at best. Finally, they are known as the 'five aggregates of grasping' (*pañca upādāna khandha*). When grasped after as being the person they inevitably bring about *dukkha*. Since the aggregates are impermanent, they are therefore ultimately suffering. Something that is the source of pain and that is impermanent cannot be a substantial or autonomous self. The five *khandhas* can be described in the following manner:

Form/Matter - *rūpa* refers to anything corporeal or physical, that is anything made up of the physical *dharmas* and their corresponding processes. Form is here to be understood, in light of the *dharmma* theory, as a compound of causes and conditions. This is the only *khandha* that can be perceived by the senses – what we experience as extended substances. This category also includes the sensory systems.¹³⁶

¹³⁶ It is important to note here that the concepts form/matter in the Buddhist context is not in any

Feeling - *vedanā*, denotes the sensations of pleasure, pain and indifference. It 'defines the quality of the impressions that result from the contact between the sense and its object' (Coseru 2012b). Depending on in which the sensory modality a sensation originates, sensations are often divided into pleasant, unpleasant and neutral. Sensations are shaped by, and shape the continual tendencies of past karmic activities.

Perception - *saññā* is 'associative knowledge as cognition, mental labelling, interpretation, recognition, how one sees things' (Garfield and Edelgass 2009, 267). In other words it is concerned with apprehension, more specifically the capacity to understand the distinctive characteristics (such as colour) of phenomenal objects. It is a synthetic mode of apprehension 'caused by a multiplicity of factors including memories, expectations, dispositions etc.' (Coseru 2012b).

Volition or constructing activities- *saṅkhāra* are a range of various responses to objects, the most important one being will or volition. These are the mental forces responsible for bodily and mental activity (such as hunger and attentiveness) that bring forth future states of existence. Volitions 'are habitual latencies that predispose and motivate an individual to have a certain type of experience while at the same time conditioning the response to that experience' (Coseru 2012b).

Consciousness *viññana* refers to the awareness of physical and mental states. This contrasts to apprehension and sensation, as consciousness is understood as the bare impression of each object, acting only as an integrating and discerning factor of experience. Apprehension and sensation on the other hand, apprehend the specific features of an object (Coseru 2012b; Siderits 2007, 35).

The notion of self as an agent with 'unlimited powers' over the aggregates, or that the self can not be something that is impermanent is made by drawing on logical

way similar to the Thomistic notion of form/matter.

consequences of the three characteristics of reality and as a reaction to the notion of atman found in the Buddha's contemporary context. When the Buddha addresses the characteristics of no-self he does not give a list of propositions to which one assents; he asks questions. The final question when going through each of the five aggregates of being is whether

It [is] fitting to regard that which is impermanent, painful, and of a nature to change as 'this is mine, this am I, this is my self?' To which the monks reply 'No, venerable sir.' And the Buddha then concludes: 'Therefore, monks, whatever material form: past future, or present; internal or external; gross or subtle; low or excellent; far or near; all material form should be seen as it really is by right wisdom, thus: 'This is not mine, this I am not, this is not my Self.' The Anatta-lakkhaṇa Sutta, as found in (Garfield and Edelgass 2009, 269)

The same is said of feeling, perception, volition and consciousness. By asking such questions the Buddha is showing that there can be no self, as none of the five aggregates in themselves or something emergent from them could fit that role.

If one reads the five *khandhas* in light of the first noble truth—that is, that the five *kandhas* explain what *dukkha* is—as Sue Hamilton does, a richer notion of personhood arises. Rather than being a bald denial of self, this teaching is a continuous undermining of the notion of a substantial self, since this is the source of suffering (Hamilton 2000, 68). It is the illusion of self that fuels craving and aversions. Before one experiences awakening these five aspects of a person are the root of grasping, passion, and craving. Ronkin provides a summary of Hamilton's conclusion:

...experience is a combination of straightforward cognitive process together with the psychological orientation that colours it in terms of unsatisfactoriness. Experience is thus both cognitive and affective, and cannot be separate from perception. As one's perception changes, so one's experience is different; we each have our own particular cognitions, perceptions and volitional activities in our own particular way and degree, and our own way of responding to and interpreting our experience is our very experience (Ronkin 2005, 43).

This way of describing the self is an attempt to not fall down on any side, be it the eternalist or the nihilist view of the self. So while there is no fixed 'self' per se,

there is still an understanding of the human person in the teaching, and this will be explored in the following.

Personal Identity

In contemporary scholarship, the view of five aggregates is given as an alternative account for personal identity. On this view, a person 'is not an entity that can exist independently of the five *kandhas*...as the reductionists say, [there] is nothing over and above the five *kandhas* appropriately organised'(MacKenzie 2008, 252). Or in other words the notion of person is the occurrence of 'a series of clusters of events (physical and mental) occurring in a "human" pattern, as opposed to, say, the canine pattern of a "dog"' (Gethin 1998, 142). There is nothing there is to be a person that is over and above the five *skandhas*; without these there is nothing.

This might sound like the Buddhist concept of self is an 'emergent and supervening reality' arising from multiple causes, but it must not be confused with the kind of self sometimes described as 'emergent' in modern Western philosophy. In Buddhist philosophy the self is only part of conventional, not ultimate, reality. The idea of the self as emergent and greater than the sum of the parts is explained in terms of parables such as the one where a king wanted the sound of a lute or the parable of the chariot as referred to previously on page 168. Unlike a Western notion of emergent self that is 'something,' however, the self portrayed in Buddhist parables is nothing. There is no sound apart from the lute, and we use linguistic terms such as 'chariot' and 'Nagasena' only to identify complexes that are important to us on a conventional level. These complexes are not ultimately real as they are only composite substances of which none of the parts constitute its essence. The emergent phenomenon is not ultimately real. The 'I' or 'the self', pronouns and proper nouns, are convenient designations for a causal series of sets of impermanent *khandhas*. Our notion of self has come into being by 'our use of such convenient designations as 'person', the personal pronouns, and personal names, in conjunction with the misguided acceptance of a naive semantic realism that takes the meaningfulness of a word to require the existence of some entity bearing that word as its name' (Siderits 1997, 463). There is no ontological commitment to complexes that are conventionally real. Understanding the self as a

practical linguistic feature alongside the various ways of analysing the components of a human being all serve the purpose of breaking down the concept of self. Words such as 'I', 'self' and 'person' do not refer to a separate substance. Rather they are convenient designators of complexes made up of causally connected mental and physical events. What Buddhism ends up with is a notion of a selfless person that is conventionally true.

In the view of a selfless person, an individual is constituted not by his essence or soul, but by how the various mental and physical factors are connected to each other. Diachronic identity of a person—the person remaining 'the same' over time—is secured by the sufficient degree of continuity and causal connectedness of the five *khandhas*, rather than an enduring self as locus for continuous identity. The *khandhas* include both mental and physical components, and so the standard account of identity includes both as well. However, as MacKenzie points out, the Buddhist account of rebirth only includes psychological continuity, which is sufficient to account for identity across lives.¹³⁷ In his words, 'the synchronic identity of a person is a matter of there being an appropriately organized complex or bundle of skandhas, whereas the diachronic identity of a person is a matter of

¹³⁷ Death constitutes an end to the normal interaction or constellation of the five *skandhas*, and certain accompaniments flow on to another life, according to *Kamma*. But unlike Aquinas, the Buddha allows no subsistent soul to 'survive' death. Continuity in rebirth is not explained by a soul that continues, but rather as a continuation of the chain of causation. There is no permanent self whatsoever. Bhatt and Mehrotra describe it the following way:

'In every psychophysical series that is unique and self-identical the succeeding stems from the preceding, and this conglomeration of fivefold series, which begins with the conglomeration of a particular form, continues till the death of that conglomeration in that form. From birth to death in this series there is a constant change, and yet there is retention with the possibility of recollection and recognition on the basis of which the past is retained in the present and handed over to the future. In death the total conglomeration does not cease to exist nor does it come to an end and gets retained so as to give rise to another conglomeration in some other form in the next birth. In this metamorphosis the physical series is present only in the form of Saṃskāras (latent impressions) sustained by karmic forces. The Karmic forces determine the nature and the form of the next birth. They also determine the fivefold conglomeration, which has to come into existence in the next birth. There is a continuity not only within one particular birth, but also from one birth to another birth' (Bhatt and Mehrotra 2000, 3).

Hoffman compares this view to one of Wittgenstein's observations in *Philosophical Investigations*: *The strength of a cord does not always depend in there being a single strand which runs from end to end, but sometimes depends in the inter-relationship between overlapping and criss-crossing fibres, none of which runs the entire length of the cord. Similarly, the early Buddhist doctrine of rebirth may be viewed the following way: there is no permanent unchanging ātman linking up successive lives with its continuous psychic fibre, but there is nevertheless a certain continuity assured by over-lapping and criss-crossing fibres'* (Hoffman 1987, 51).

there being a causally and functionally integrated series or stream of skandhas' (MacKenzie 2008, 252).

This is to say that a person is seen as an entity that is nothing more than a particular arrangement of its parts. A person is dependent on its parts, and its properties come from the underlying parts and how those parts are related. Further the causal powers of the whole can be accounted for by the causal powers of the parts. This constellation that makes up a person is relatively stable due to the causal connectedness and dependent origination, hence one does not go from being a human in one moment to being a dog in the next; instead, there is a gradual change from baby to child to adult. The 'person' remains the same not because there is a substance that stays the same, but because 'certain clusters of physical and mental events are linked causally' (Gethin 1998, 142). Here the Buddhist notion of impermanence and dependent origination comes into play – change in a person is understood purely in terms of causal connectedness between different *dhammas* and not as a substance undergoing change of its secondary qualities – as seen in the parable of the flame.

The Mind

This has consequences for how Buddhism approaches the question of mind in contrast to the Cartesian framework. As we have seen, for Buddhist philosophy there is no agent or cognizing 'I'. Instead, there is an array of 'causal factors resulting in momentary cognitive events' (Coseru 2012b). In other words, Buddhism holds what we might call a process view of the mind (Hoffman 1987, 47). It understands 'the cognizing agent as merely another way of referring to the embodied and dynamic functioning of the five aggregates [*skandhas*]' (Coseru 2012b). The Buddha teaches that all of the four *nāma khandhas* (that is the four of the five *khandhas* that are related to the mind) are dependently originated. What we call 'mind' is no more than a continuous series of separate events, each lasting no more than a moment, followed immediately by another. There is no mind that is undergoing or having this chain of events - there is only the events themselves. Because the chain of events is continuous and unbroken, it gives the illusion of a permanent self in or to whom change is taking place.

Thus, since all facts about our mental lives are understood in terms of the causal relation among mental events, ‘the mind becomes an unnecessary, unobservable posit’ (Siderits 2007, 45). Since there is no mind as a substance, the problem of the mind and its relation to the brain is quite simply non-existent in Buddhist metaphysics. As we have seen, consciousness and cognition are neither located solely in the mind or the brain, rather they permeate the entire human organism. As a result, neither cognition nor consciousness can be reduced to any single entity such as the brain or the mind. It is rather the ever-changing causal interaction of events that *is* the mind. Finally, this process of emergence is not located on an individual level merely, but is rather ‘an ontological complex public affair of reciprocity and mutuality...the mind can be understood in terms of an emergent and supervenient reality [though importantly not *ultimately real*] consisting of affectively embodied interactions with the environment even while being reducible to neither the bodily functions nor the environmental constraints’ (Yong 2005, 156).

The Cartesian framework understands the senses as faculties of an agent. Buddhism acknowledges neither agent nor mind, and so provides a very different understanding of the senses as receptacles of experience. The senses are understood as physical organs interacting with external physical objects of conventional reality. In other words, they are ‘instruments or mediums joining together the external spheres of sensory activities with the internal spheres of perception’ (Coseru 2012b). The Buddhist account of sensory activity and cognitive awareness is one of reduction of experience to its contents, and then analysing it in terms of its fundamental elements and functions, of which all are, as we have seen, dependently originated.¹³⁸ Ordinary mental activity is *papañca*, which is normally translated to ‘mental proliferation’, but literally means

¹³⁸ The cognitive chain in the *Madhupiṇḍika Sutta* in the *Majjhima Nikāya* is as follows: ‘*Dependent on the eye and forms, eye consciousness arises. The meeting of the three is contact (phassa). With contact as a condition there is feeling (vedanā). What one feels, that one perceives. What one perceives, that one thinks about. What one thinks about, that one mentally proliferates (papañca). With what one mentally proliferates as the source, perceptions and notions born of mental proliferation beset a man with respect to past, future and present forms cognisable through the eye*’ (MN 18 i III-112). Thanks to Dr. John Peacock for providing this quote.

'fabrication'. Any object of our experience is not the object itself, but rather the centre of a multitude of associations, as in the chariot of King Milinda (see page 168). In seeing the chariot we perceive an object with wheels, axles, made of wood and metal, suitable for transporting us from one place to another. Our perception is shaped by 'a stream of conceptualising tendencies, which have their ultimate source in linguistic conversations and categorising practices. These conceptualising tendencies overwhelm and distort the perceptual experience' (Coseru 2012b).

Consciousness, like any other mental activity, is dependent on some condition or other. It is always directed to some particular object, which matches the type of conscious experiences. For example, we have 'visual consciousness' when we have a sensory experience in the eye. In Ronkin words: '*Citta*, therefore, always occurs associated with its appropriate *cetasikas*: Mental factors that perform diverse functions and that emerge and cease together with it, having the same object (either sensuous or mental) and grounded in the same sense faculty' (Ronkin 2005, 422). Here, physical senses enable mental processes that otherwise would not exist by giving specific kinds of input to the mind. Similarly, Harvey points out that 'certain mental processes also lead to the origination of certain types of physical processes (which are also dependent on other physical processes), and some of these (mind-originated motion and solidity elements), in turn, may be modulated by mental processes so as to lead to specific bodily movements or vocal articulations' (Harvey 1993, 30). Ultimately, however, there is no essential subject 'having' the consciousness experience. It is merely a series of complex causal processes.

This leaves us with a view of human persons as something that is part of conventional reality, subject to impermanence, that has no essence of self and that is the source of suffering. Like everything else part of conventional reality, a person is made up of other, more fundamental, features. So while there are several ways of analysing human nature, the one most common is the view of a person as a constellation of five aggregates. These five aggregates include both mental and physical components and are on equal ontological footing, meaning there is no

mind/body problem as such in a Buddhist framework. Rather than there being a single substance or overarching unifying self, a person's identity is understood in terms of causal connectedness in a way that allows for change and continuation simultaneously. The mind and consciousness receive much attention in Buddhism. The mind is both the problem—since the source of attachment and craving—and solution – since through practice and meditation it leads to awakening.

A Digest

Buddhism does not have a problem with fitting the mental realm into a purely mechanical and physical world, because it has a different view of causality, of matter, and of what is ultimately real. There is no dualism to make sense of or any mind/body problem to solve; consciousness/the mental and matter/the physical are on equal ontological footing when described in terms of Buddhist process metaphysics. The refusal in Buddhism to subscribe to pure nihilism or substantialism and its insistent attempt to carve out a middle way emphasising process, impermanence and change when describing reality is very different from the route Western philosophy has taken following a substance ontology. Individuation in Western philosophy is generally understood in relation to matter. For example, this chair is this particular chair because it is made of this particular lump of matter. In Buddhist philosophy, by contrast, this chair is this chair (a conventionally true statement), because of the particular chain of processes that has lead up to this moment in the chair's continuous configuration. While it is conventionally true, then, that there are things, objects and persons, there is ultimately only an ever-changing flux of constellations. The Buddha's teaching attempts to show that the fundamental problem of human existence is that we attempt to categorise intellectually and hold on to emotionally the world of experience. The way to end this problem is to analyse, deconstruct and unveil the seemingly stable, solid and static reality we experience, so that we may see what is ultimately real: there are no essences, no permanence and not-self. All analysis, categorisation and use of parables in Buddhist thought have this aim in mind (no pun intended).

Recently, philosophers such as Susan Blackmore (2003) (also a self-proclaimed practising Buddhist) have suggested that adopting elements of Buddhist philosophy might help move beyond current problems in for example consciousness studies. While it is true that Buddhist philosophy has no body/mind dualism, because it places all the *khandhas* on equal ontological footing and thus provides a seemingly infinite ground for pragmatism, there are still important questions to deal with for philosophers eager to adopt Buddhist metaphysics. In relation to the theory of two truths, for example, Blackmore's suggestion is that we live our everyday lives 'as if' they were real, while knowing that ultimately they are not (Blackmore 2003, chapter 27). However, one question here is whether (or precisely how) the theory of two truths, which is what provides the ground for such pragmatism, can really be separated from the Buddha's soteriological purposes. The aim of Buddhist philosophy is not to provide a safe ground for experiencing the *Dukkha* or coping with everyday experience, but to provide a path 'out' of experience altogether. It is not only that human attempts to 'freeze-frame' the ever-changing flux are ultimately unsatisfactory; the ever-changing flux itself is ultimately *Dukkha*. The Buddhist path goes neither towards a kind of 'courageous' facing-up-to the brute fact of the nihil, nor towards a saving of the appearances of everyday life 'as if' they were real; the path goes to *nibbāna*, beyond both flux and stability.

6. A Triologue

*Thomas Aquinas, the Buddha, and René Descartes walk into a bar.
The bartender looks up and says: is this some kind of joke?* ¹³⁹

The brunt of the problem in the contemporary field of Philosophy of Mind is not that the options of idealism, materialism or dualism seem to exhaust the space of possibilities leaving the debate trapped in a dead-end. Put another way, the problems found in the current debate are in fact not ultimate or inherently necessary problems, as they would be if the space of possibilities were truly exhausted. Rather they result from a combination of underlying assumptions, labelled the Cartesian framework. Importantly, what makes the framework 'Cartesian' is *not* a general commitment to substance dualism, but the fact that the *kind* of materialist monism it presupposes has its roots in the Cartesian dualism it (most often) explicitly rejects. Most developments since Descartes were responses to either one or the other of the two substances he allocated to the mind and body. Even after the fall of idealism—represented in various versions by Berkeley, Hume and Mill—the specific *version* of materialism that would later develop into physicalism, and indeed still remains the dominate understanding of reality, was a 'degenerate' monism based almost entirely on the Cartesian notion of matter. Hence, the fundamental understanding of reality remains the same. It is not so much Cartesian dualism overcome as Cartesian dualism repressed and the mind and intentionality pushed to the fringes of what counts as reality.

The historical diagnosis of the Cartesian framework was intended to underscore the current understanding of the mind, the self and matter as universal or necessary. The premises underpinning the contemporary debate are not given. In light of pre-Cartesian and non-Cartesian metaphysics, such as Thomistic

¹³⁹ By courtesy of Johan Fredric Key Berntsen.

metaphysics and Buddhist metaphysics, alternatives to these underlying assumptions have become apparent. They give us another way of looking at metaphysics and ontology, and provide us with different stances towards reality and our experiences. This chapter attempts to bring the three frameworks into conversation. It begins by highlighting some of the ways that the non-Cartesian frameworks differ from the Cartesian one in their views of reality, the material and human nature. It will then bring them into dialogue with the Cartesian framework, considering in what ways Buddhism and Aquinas might provide possible alternatives to the current deadlock, in particular the mind/body problem.¹⁴⁰

6.1. A Comparison of non-Cartesian Metaphysics

Reality

In general both Aquinas and Buddhism are trying to describe reality as we experience it, a reality that presents itself as at once ever-changing and consisting of stable features. Both of them consider reality to be knowable and graspable through our senses via a number of different types of conceptualizations, methodologies, and theoretical and empirical considerations. However, they differ in the understanding of what purpose such knowledge serves, what aspect of reality it describes and if it is 'true' or 'good'. And as we have seen, they take different approaches to straddling the somewhat paradoxical situation of apparent stability and flux that marks our experiences of reality. Common to both, however, is that the questions they are trying to get at are questions of being: 'what is the nature of being?' and 'what are the beings?'. Buddhism is a kind of process metaphysics emphasising that everything is in flux and that there ultimately is no difference or distinction, and that hence there is ultimately no being or essence—only flux. Thomistic substance ontology, by contrast, holds on to distinction and difference in the midst of change via Aquinas' adaption of Aristotle's theory of form and matter, and act and potentiality. These are hence two substantially different ways of understanding reality. The following will consider some of the differences

¹⁴⁰ Obviously, a full reconfiguration and articulation of the metaphysical framework is a project far beyond the scope of a single chapter of a PhD thesis – indeed for a single scholar. Nonetheless, it is hoped that the present thesis might constitute one minor contribution towards constructively engaging in this kind of rethinking, and act as an honest call for dialogue with and true appreciation of alternative options.

first generally and then more specifically in their respective understanding of reality as layered.

For Aquinas there are such things as being and substances; reality consists of a hierarchy of being. Material things, only exist contingently, they come into being and they pass out of being. Hence, while there is room for change and dynamism, there are certain features that separate and define particulars and there is not just one all-inclusive flux. Because of this Aquinas holds that what a thing is differs from its existing or being. Crucially, this makes his metaphysics different from that of Aristotle, who does not make the same distinction. Taking his cue from the Trinitarian God—which is ultimate reality—Aquinas designates as ontologically real the continuous outpouring and exchange (or flux) that takes place in reality and the experience of distinct particulars. Material things have their existence and being in participation; that is, they depend on causes both in order to become and to be. While reality consists of substances, which are ontologically distinct, these do not exist separately or independently, but stand in constant and complex relation to their surroundings. The world as Aquinas sees it is not a complex set of interlocking cogs in a machine set in motion down an unavoidable track, but much more like a living organism in need of constant sustaining, moving in roundabout ways towards a *telos* or fulfilment of being. Aquinas (and Aristotle) think it is true of natural objects and their behaviour that they cannot be fully understood in terms of their material constituents and their properties, but have to be explained in terms of their essences, form and nature. Aquinas theory of being also includes transcendentals as properties of beings as beings; every being as a being is one, good, true and so forth. As Stump puts it, “Good” and “being” are the same referent, differing only in sense. What all desire is what they take to be the good, and what is desired is at least perceived as desirable. Desirability is thus an essential part aspect of goodness’ (Stump 2003, 14).¹⁴¹

Aquinas’s inclusion of essences and natures reflects the fact that he takes an anti-reductionist view; he insists that natural objects, including human beings, are not

¹⁴¹ At this point we might note that this stands in stark contrast to the Buddhist view of reality as suffering, and suffering as a consequence of desire.

just assemblies of more basic material constituents and hence should not be conceived of just in this way. So in a Thomistic metaphysics, the Buddhist parables of the chariot or lute being disassembled to show their ultimate non-existence, do not make sense. From Aquinas' perspective, by contrast, the analysis and deconstruction of the wagon and the lute in fact show that in order to be what they are, they are more than a mere collection of items randomly put together with a convenient linguistic label. Both the lute and the wagon are more than their parts as new capacities arise from their particular configuration. So even though these particular examples are artefacts and not natural objects, they still have a form and hence have a legitimate place in an ontology of the world.

Buddhism on the other hand uses these parables to argue that what seems to be something, can in fact always be deconstructed into smaller parts until what is left is pure change or flux. As a process metaphysics, Buddhism reverses the primacy of substances, and insists on processes and change as the basic order of being. Experience of reality is in Buddhist thought best accounted for and understood by means of occurrences and processes and not things – things always change. Therefore processes are basic. Entities are a by-product made by our mental processes. Reality as we experience it has two facets to it: conventional reality, which is reality as we experience it full of objects, things and people; and ultimate reality, which is what reality really is. While Buddhist analysis of conventional reality leads to basic features such as the five *khandhas*, *āyatanas*, *dhātu* and *dharmas*, importantly none of these are considered essential or subsistent substances, but rather as a variety of constantly changing factors. Ultimate reality, for Buddhism, is a pregnant possibility or emptiness. Yet contrary to Aquinas's view of actual reality, there is no form that shapes or defines the flux. There are no ultimate distinctions or differentiations in the ultimate flux; trying to impose any such amounts to a violation against ultimate reality, thus leading to *dukkha* – suffering/unsatisfactoriness. For Buddhism, the features in reality that appear stable to us, come from the particular constellations of causes and conditions, prior paths of change as directed through *kamma*, and the convenient designators we use to identify them. The experience of permanence in conventional reality is explained on the basis of continuity and dependence in the causal series. Reality is

described by three characteristics – suffering, impermanence and not-self. Suffering applies only to conscious beings, while impermanence and the lack of permanent self or essence applies to all of reality. This is the structure of the universe in Buddhism. All phenomena, both physical and mental are combinations of other things coming together as conditioned by previous events. Everything is conditioned, relative and interdependent. Nothing is a substance or thing in or of itself.

Despite these fundamental differences, the metaphysics of Buddhism and Aquinas have in common an understanding of reality as rational or knowable. Buddhism holds this view because of its theory of dependent arising as defining experienced existence, and the twelve step causal chain of existence can be understood rationally, which is the basic premise for being able to achieve *nibbāna* in the first place. For Aquinas reality is knowable because of his understanding of Being as a personal rational God in whom—through participation—the world receives its existence and because we have access to reality through our senses.

Similarly, both accounts of reality have aspects of some form of transcendence at their core. By this I mean that the understandings of reality found in both Buddhism and Aquinas are implicated in a larger transcendent narrative; an explicit soteriology. Regardless of agreeing with their soteriology, it is arguably this feature of their respective metaphysics that eventually allows them to capture a richer notion of reality as we experience it, than is possible through the purely-immanent metaphysics of modern and western reductive physicalism. It should perhaps be noted that a purely physicalist framework apparently lacking an element of transcendence is not some kind of a neutral metaphysical position, so that any notion of transcendence could be dismissed outright as an optional add-on. Furthermore, this element in itself does not make any of the alternative frameworks ‘anti-scientific’ – though they will likely be incompatible with ‘scientism’. They both insist that reality is rational and to some degree comprehensible, as we have seen, though of course their respective accounts of reality are very different.

Aquinas's account of reality as filled with substances made of matter and form allows for a description of reality as a hierarchy of inter-related levels – which grants some ontological significance for most of them. Buddhist's reality, by contrast, is empty of substances, giving only ontological status to process and change as such. Hence, we might say that Buddhism gives a reductionist account of reality, while Aquinas gives a non-reductive account.¹⁴² The next section considers some of the ways these reductionist vs. non-reductionist stances play out when the two frameworks are compared.

There are four main areas of difference between Buddhist and Thomistic metaphysical frameworks; their views on essence or form; their notions of actuality and reality –which again underpins their view on matter; their views on causation; and finally their views on human nature, which follows from their respective commitments in the former three areas. The following will compare their views on form, matter and causation, and their views of human nature will be examined in a separate section below.

Form, Matter and Causation

Buddhism holds to process being ontologically basic, as made explicit in the teachings concerning not-self or no-form. There is no stable core or essence by which a substance exists. This is not however, an outright dismissal of the self or essences; rather it is construed as a kind of 'non-committal' approach – an attempt to find a 'middle way' between essentialism and nihilism. This 'middle way' places the defining features of substances as we experience them not in the things themselves, but in our cognitive appraisal of the occurrences and the configuration of the causal factors involved. For Aquinas, by contrast, 'form' plays a vital part in his theory of substances. It is the form that makes a thing actual and that configures matter into what it is. However, the form is not the essence of a thing. The essence includes both form and matter, giving substances (as comprised of form and matter) an ontological status they are denied in Buddhism.

¹⁴² This, importantly, should not be confused with the reductive vs. non-reductive stances in the contemporary debate, since these do not share the same metaphysical underpinnings.

For Aquinas reality includes both the material and the nonmaterial. However, this does not imply any kind of substance dualism in regards to the material world and human beings. According to Aquinas the corporeal world is made up of material things or substances.¹⁴³ A substance is defined as ‘that which exists in its own right: it is a discrete thing in the world’ (Eardely 2010, 28). While a substance is numerically one, it is both form and matter. Generally speaking, a substance’s matter is the material out of which the substance is composed while the form is the actualiser and arrangement of the matter. A substance’s matter makes it a particular individual, while the form makes it the kind of thing it is. One interesting point to note here is that neither matter nor form can by itself be the essence of a thing or make the thing what it is - both need to be present. Another important point—and especially when comparing Buddhism and Thomistic metaphysics—is that the latter’s notion of configured matter is not a static one. Rather, the Thomistic notion of form is a dynamic configuration that includes causal relations between the material components of the thing as well as more stable features. The reason why it is a dynamic configuration is that the form of material substances has two facets to it: the substantial form - which makes the substance what it is; and accidental forms, which configure something that already exists. Accidental forms can change without there occurring any change of the substantial form. Further, a substance has only one substantial form, but it can have many accidental forms.

Aquinas sees substances are not only compounds of form and matter, but also of act and potency. As mentioned in chapter four, act and potency constitute ‘the distinction between the possibilities inherent within things and their realisations’ (Eardely 2010, 27). In contemporary thought, the default position is arguably that if something is material, then it is by default actual; material = actual. For Aquinas however, matter is only actual if it has form. Matter with no form (prime matter) is pure potentiality and can, according to Aquinas, only exist theoretically.¹⁴⁴ In other words, while we can remove form from matter conceptually, everything that exists

¹⁴³ Due to the nature of the project, this thesis has not taken into consideration Aquinas’s view on angels and God, but focussed more or less exclusively on the Thomistic view of the corporeal world.

¹⁴⁴ This notion of prime matter as unconfigured matter or rather pure potentiality without any distinguishing features bears some resemblance to the Buddhist notion of ultimate reality.

in actual reality is configured in some particular way; it has form. Hence, for Aquinas, form is what makes everything that exists actual. Matter (again, not prime matter) is the principle of individuation - it is that which distinguishes one specific corporeal substance from other corporeal substances.

Contrast this with Buddhism, where there are no forms that make conventional reality actual. On this view, conventional reality, in which we experience substances and things, is ultimately not 'actual' (in the Thomistic sense). As a result, for Buddhism, reality itself is in fact not actual, but a kind of pure potentiality, a pregnant emptiness where nothing is yet defined or shaped, and which therefore contains all possibilities. This emptiness is itself void of objects and phenomena, but it is not nihilistic as in nothing exists or as vacuum - a space where nothing exists. Reality is a limitless, pregnant nothing.

For Aquinas, by contrast, potentiality is neither limitless nor prior to distinct things, but rather rooted in the nature of things that are actual. The form of a substance will determine what the substance's potentialities are. In other words, potentialities *follow* actualization, for potentiality can never actualize itself but needs to be actualized by something that is already in act. For Aquinas, then, it is the distinction between act and potency in a substance that allows for change. Change is understood as a realization of some potentiality brought about by some external influence. Buddhism does not give ontological status to substances and sees actuality as an illusion. Instead, it accounts for change in merely apparent stable features of the world through the notion of dependent origination.

Even though Buddhism holds that matter is not part of ultimate reality, its account of matter as part of conventional reality nonetheless has something to say to the contemporary Western debate. In Buddhism, matter is neither a primary metaphysical substance, nor does it constitute reality (*Dhamma*) as it ultimately is. *Rūpa*, as understood in light of dependent origination and the theory of two truths is one of several components of conventional reality or mind-dependent experience. Matter is then a particular instance of a combination of a number of the 82 *dhamma*. The defining feature that makes a thing what it appears to be, is

the constellation of these numerous 'causes'. The Buddhist description of elements of conventional reality as configurations of different *khandas* and *dhammas* arguably has vague similarities to the Thomistic concept of form configuring matter. In this instance, the defining difference between the two lies in the notion of the identity of a thing. In Buddhism this identity is understood in terms of the continuity in an infinite causal chain, while for Aquinas it is inherent in the substance as a particular composition of form and matter.

Causation is important for both Aquinas and Buddhism, and both accounts are different from the account of causation found in the Cartesian framework. The Cartesian framework discards the notion of causation as a relationship, and instead understands it as a successive series of distinct events, one following the other in a linear fashion. For instance, a glass is nudged (one event) and the glass topples (a subsequent event). The philosopher (operating within a Cartesian framework) concludes that since the latter event comes after the first event they must be separate, and therefore it also follows that *in principle* the effect might fail to follow after the cause. Within a Thomistic (and Aristotelian) framework this claim would be bizarre, as 'it is the *things* that are causes, not events; and the immediate efficient cause of an effect is *simultaneous* with it, not temporarily prior to it...[They] are really just the same event considered under different descriptions' (Feser 2009, 21). Aquinas, following Aristotle, operates with four causes - formal, material, efficient and final cause. In order to have a full understanding of something you need to include all four causes. Cause and effect cannot be detached from each other on Aquinas's account, neither can efficient cause stand alone in accounting for change and motion. Buddhism, in a similar fashion, does not see causation as a linear chain of events. Rather, everything, including all mental events, occurs as a result of a multitude of causes and conditions. It is therefore more accurate to talk about origination rather than causation. In other words it is not '*a* that causes *b*, but *b* occurs because there was an *a*.' (Ronkin 2005, 206). Dependent origination arrives at an understanding of a synchronic interdependence between any whole and the parts in which it consists. Any complex whole—such as a human being—is dependent on its parts, e.g. the heart, lungs and skin, for his/her existence. Equally, any part has its characteristics

in virtue of the whole to which it is a part. Without the whole the parts would not exist. These encompassing views of causation found in Buddhism and Aquinas both challenge the notion of causation found in the Cartesian framework.

Both the Buddhist and the Thomistic framework recognize some notion of configuration, but differ in the importance they attribute to it. Buddhism sees it as impermanent and so as having no essence. Aquinas, on the other hand, understands configuration partly as form, so that even in constant change a thing can potentially substantially exist; its essence need not change. This makes Aquinas's metaphysics a substance ontology, in contrast to the process ontology found in Buddhism. Subsequently, as we have seen, their perspectives on matter and causation differ. While in the Thomistic framework, substances and things are ontological features of reality, a Buddhist metaphysics holds that these are only part of conventional—not ultimate—reality. Rather occurring *in* reality (as in Thomism), causation and change are defining features of reality as such. Having highlighted these fundamental distinctions between the two frameworks, we now turn to their respective views of human nature.

Human Nature

Crudely put, it might be said that both Buddhism and Aquinas have a view of the person that involves it being a particular arrangement of matter. Buddhism understands a person as a constellation of five *khandhas*; Aquinas sees a person as constituted by form and matter – an embodied creature, with a particular kind of body, as brought into existence by its rational soul (form). For Buddhism a person is dependent on its constituent parts in the sense that a person is nothing more than its parts; no new emergent features secure the ontological status of the person as distinctly such. For Aquinas however, the particular arrangement of matter is due to the substance's form; and in the instance of a person, the rational soul—the form—secures the ontological status of a person as something more than the sum of its parts. This is the main difference between the two.

Seeing human beings as embodied persons Aquinas has what we might call a non-reductionistic¹⁴⁵ account of human nature. A human person, like any other material entity consists of form (soul) and matter; and importantly counts as ‘one’ thing. The soul and matter are not two separate substances, where we need to account for their interactions. Rather the two are what makes reality what it is; there is no ontological gap between them that needs to be bridged. For something in the material world to be actual, to exist, to be real, it will by default be an instance of form and matter. Cognition and the mental is not an additional feature added to matter, but a natural occurrence due to the nature of the form of human beings. Emergence of higher-level structures and functions with causal influence is also unproblematic in the account of reality in terms of form/matter as form is not something only the basic constitutes of reality have, but it is also present in higher level substances.

Buddhism is committed to the doctrine of no-soul (or not-self) and therefore provides a version of a reductionist account of human nature. So while there is no ‘self’ in the Buddhist account it is not reductive in regards to the mental or higher cognitive functions. The *dhamma* theory in Buddhism tries to articulate the underlying structure of consciousness and reality as we experience it by clarifying all mental and physical events that make up one’s world, as well as their relationships to each other. On this view, *dhammas* are conceived as the fundamental basic events, which in combination with other ultimate events make up reality as we experience it. On this account, a human being is an aggregate of mental and physical occurrences. There is nothing there is to be a person that is over and above the five *kandhas*. Hence, the emergent ‘pattern’ labelled—in conventional reality—a person must not be confused with the kind of emergent ‘self’ sometimes discussed in contemporary Western philosophy of mind; nor is it a pattern or configuration like Aquinas’s notion of form. The emergent ‘pattern’ is nothing in itself, but a sequence we happen to label linguistically. In this analysis both matter and the mental are given the same (non) ontological status, meaning there is no gap that needs bridging on the Buddhist account of the mental and

¹⁴⁵ Again, the descriptions of Aquinas as ‘non-reductionist’ and Buddhist as ‘reductionist’ have a different connotation than the same words in the contemporary debate.

physical either. In other words, while there is a notion of person in a Buddhist perspective, it is not a substantial self – the self itself is an illusion. Aquinas’ notion of the person is more robust, but it is not an immaterial rational self as found in the Cartesian framework. Rather it is a notion of human beings as embodied creatures, whose powers and capacities are attributes of their whole being and not of their parts – their brain, for instance. In their own respective ways, both of these approaches uncover fundamental aspects of the conceptual confusion in the contemporary debate.

While Aquinas and Buddhism take different—even opposing—positions in their understanding of reality, matter, and causation, both perspectives challenge the core tenets of the Cartesian framework. Of course, the reason for using these two frameworks is neither to suggest that they are compatible with one another, nor that they are compatible with nor even obvious alternatives as they stand to the current mechanistic-cum-materialistic view of reality. Rather, the aim is merely to utilize them in order to highlight that our current way of thinking need not be so, since the challenges we face do not appear as problems within other metaphysical frameworks. This gives us grounds to re-think our contemporary stance. In order to make this clearer the next section will examine more precisely which features of Thomistic and Buddhist metaphysics contrast to those of the Cartesian framework, drawing to a close by suggesting some assumptions that can serve as a basis for further development. The first point to be examined has to do with the understanding of reality; the second with views on causation and matter; and finally the understanding of human nature.

6.2. The Difference Between Cartesian and non-Cartesian Frameworks

This section provides an outline as to why these two non-Cartesian frameworks might be fruitful alternative perspectives, by looking at their views of reality, matter and causation, as well as their view of human nature. However, what follows will not be a detailed account of how current data from the various sciences might be reinterpreted in light of Buddhism or Aquinas. Rather the aim of

this section is simply to show that the starting point for understanding the world can be different from the current one rooted in the Cartesian framework.

Reality

The main difference in both Aquinas and Buddhism compared to the materialistic-cum-mechanistic account of reality is their ability to accommodate and accommodate for both complexity and the mental as integral aspects of reality. They understand reality as layered, but they do not have the same issues with reduction and top-down causation found in the Cartesian framework. They are able to do this because of their views on matter, being and reality, and causation. On neither view are higher-level properties and functions, such as the mind, mere epiphenomena with no causal influence; rather they are features of reality that are legitimate and that can exhibit top-down causation. By contrast, the Cartesian framework equates the real with the 'empirical', where the latter is understood as that which we can observe either directly or indirectly, hence limiting reality to that which is physical or at least inferable from the sciences available to us. This is exemplified in the following quote from Hobbes in *Leviathan*:

The world, (I mean...the Universe, that is, the whole masse of all things that are) is corporeal, that is to say, Body; and hath the dimension of magnitude, namely, Length, Breadth and Depth: also every part of Body, is likewise Body ... and consequently every part of the Universe is Body, and that which is not Body, is no part of the Universe: and because the Universe is all, that which is no part of it is nothing; and consequently no where. (Hobbes 1976, 465)

In the above quote, being and existence are conflated with each other and with the empirical understood as that which is extended in time and space. This implies that numerous features of the world that are part of our daily interactions and experience are already by definition not strictly real. Of course, the old-time Positivism is generally out of favour, but there is still a strong sense of scientism, which creates a divide between quantitative and qualitative research methods, and gives primacy to the quantitative account of reality as the most empirical—and so legitimate—way to knowledge.

First, this subsection will consider reality per se (that is what it entails to be real), and secondly, it will look at the understanding of reality as layered.

Aquinas and Buddhism challenge this way of thinking precisely because they insist on not conflating the concepts reality, actuality, and physical/empirical. For Aquinas *being* is the most comprehensive concept there is, as it applies to everything that exists.¹⁴⁶ Aquinas says ‘nothing can be added to being as though it were something not included in being – in the way that a difference is added to a genus or an accident to a subject – for every reality is essentially a being’ (QDV 1.1 as quoted by Feser 2009, 32).¹⁴⁷ For Aquinas, being is neither an *equivocal term* nor a *univocal term*. This means that ‘being’ is a general term and the things that it is applied to cannot possibly be considered ‘beings’ in the precise same manner (as ‘being’ simply numerically multiplied); equally, it is not an ambiguous term either, because the sense of being is the same in all the different things it designates. Instead, Aquinas understands being as *analogical*, ‘where analogy constitutes a middle ground between the equivocal and univocal usages of terms’ (Feser 2009, 32). This means that different things have various modes of being, as neither completely identical nor absolutely incomparable.¹⁴⁸ Any thing that is in a state of being exists and is to some degree ‘actual’ and has potentialities that can be brought into act.¹⁴⁹ However, it is incoherent to speak of something purely potential as existing; it needs actuality in order to exist. Every kind of being is then composed of various degrees of potency and act as primary and intrinsic principles. This means:

that material beings are not composites of actuality plus some kind of elusive stuff known as matter, they are instead just composites of certain sorts of actuality. Reality is actuality all the way down, and substances are bundles of actuality, unified by organisation around substantial form (Pasnau 2002, 131).

¹⁴⁶ ‘Real being is conceived as a dynamic inner act of presence, which has a natural aptitude and tendency to flow over into activity proportionate to and expressive of its nature. Every act, he [St. Thomas] says, is naturally communicative of its own perfection, according to the degree in which it is in act. Since esse is the supreme act, the higher and more intense is the act of existence in being, the more it is connatural to it to pour out and express its perfection, more richly and generously, both within itself and to others’ (William Norris Clarke 1994, 8).

¹⁴⁷ Furthermore, Aquinas understands being to be a *transcendental*, that is, ‘something common to all beings and thus not restricted to any category or individual’ (Feser 2009, 33). Hence, being is ‘convertible’ with other *transcendentals* such as One, True, Good, and so forth.

¹⁴⁸ This is a valuable distinction to have when considering different levels of reality – there are different modes of being in reality – but all levels exist and are real as such.

¹⁴⁹ For simplicity’s sake I will not go in to the notion of God as pure act.

Rather than thinking of reality as defined by (Cartesian) matter or stuff, reality should be understood in terms of actuality, thus giving primacy to the form, which brings about actuality, and not to (Cartesian) matter as in current forms of physicalism.¹⁵⁰ Instead, matter—particular corporeal substances—is only ‘actual’ when it has form; without form, matter cannot exist. Hence, all that exists is ‘actual’, and crucially, actuality is hence not limited to what the Cartesian framework understands as the material or physical. Further, for Aquinas, potentiality is rooted in the actual, and it is this combination of act and potentiality that allows for change. For Aquinas, then, a corporeal substance—or indeed the whole of the physical universe—is an inseparable compound of matter and form, essence and existence, and act and potency, which is mind independent. This means that for Aquinas while the ‘actual’ happens in time and space it is not reducible to its physical empirical substrata. On Aquinas’ view, then, the ‘empirical’ is hence only a narrow stratum of reality – yet a real one. Furthermore, it is not limited to the quantifiable, since in order to understand the empirical it is not sufficient merely to account for material and efficient causes. This would only be a partial explanation of any phenomenon; a complete account must include formal and final causes as well. This understanding of ‘being’ is then very different from the notion of being generally operated with, which is generally in a broad sense treated as an inherent property of that which has physical extension or in a narrow sense to that which has a level of consciousness.

Buddhism is equally distinguishable from the Cartesian framework, but its understanding of reality, matter, and causation is quite different from the Thomistic one. On this view, the stable essences that are experienced are only conventionally real; ultimately reality is a constant flux with no stable cores or essences. The three characteristics of reality are impermanence (*anicca*), suffering (*dukkha*) and not-self (*anattā*). All existence is impermanence and without essence (‘gross impermanence’). Ultimately speaking, then, reality is empty (*suññatā*) pure potentiality and so strictly speaking non-existent or non-being. *Suññatā* alludes to

¹⁵⁰ Remember here that the (Thomistic) matter a form configures, is always already actualised by a form. The exception is an element. In an element, the smallest possible part of reality, its form is actualising prime matter.

the lack of intrinsic existence of all phenomena and holds true of all things and beings. It is not, however, to be confused with a nihilistic understanding of emptiness. It does not mean nothingness; rather it is a middle way between eternalism and nihilism, making it the central thrust of Buddhist soteriology, essential to the Buddha-nature. It is complementary to all other concepts and teachings such as dependent origination, the notion of ‘two truths’ and not-self. While this is Buddhism’s view of the ‘actual’, the articulation of emptiness varies slightly between the different Buddhist traditions. In one sense, this represents the polar opposite of Aquinas’s definition of the actual corporeal world as containing (but, as we have seen, not being limited to) real substances, objects and persons. However, Buddhism also understands ‘reality’ in terms of conventional reality – the experienced reality that emerges from the causal patterns in the ultimate flux (‘subtle impermanence’). Given the appropriate constellation of causes and conditions all phenomena will arise. We recognise entities as substances due to the pattern of their underlying features such as the five *khandhas*, *āyatanas*, *dhātus* and *dhammas* –none of these are considered eternal or ontological substances, but rather as a variety of constantly changing factors. Everything is subject to dependent origination, which means they are brought about by previous causes and go on to cause other phenomena. Due to aging and change they do not endure for more than a moment in time. Our experience of stability and continuity apparent in conventional reality is not grounded in the essence of the entity, but emerges from the chain of causation (dependence) and the convenient designators we use to identify them. All aspects of reality or phenomena are combinations of the five *khandhas*, *āyatanas*, *dhātus* and *dhammas*, conditioned by previous events.

Like the Cartesian framework, both Buddhism and Aquinas take it to be evident that higher levels of reality are in some ways dependent on their lower level substrata. However, the nature of this dependency, the ontological status of the various intermediate/higher levels, and the direction of causality are assessed differently than in the Cartesian framework.¹⁵¹ Contrary to the Cartesian

¹⁵¹ In his seminal book on Systems Biology, *The Music of Life* (2006), Denis Noble makes an attempt at this. Noble challenges ‘the reductionist causal chain’ where the whole organism is determined from the bottom up, as well as the so-called ‘gene-centred view’, pointing out that ‘*there is no one-*

framework neither Buddhism nor Aquinas have the same problems with top-down causation or reduction. In Buddhism conventional reality reaches beyond this world, but encompasses a vast hierarchical cosmos, which includes gods, demi-gods, persons, and substances which are all made up of constellations or configurations of the 82 *dhammas*. The *dhammas* themselves fall into categories of material, nonmaterial, consciousness, and time and space. Because all of these categories share the same (non) ontological status, top-down causation just is not an issue in the first place. The features of reality are not 'actual' in the (Cartesian) sense that they occur in time and space, since time and space are themselves understood to be categories of *dhamma* in flux. The appearances of stable features in the world, which we can observe empirically, are not results of actual essences, but of our cognitive capacities and the linguistic designators we give to patterns in the flux. Since there are no essences in Buddhism, as exemplified in the parable of the chariot or the lute mentioned on page 168, it can be seen as reductionist. Buddhism however regards both matter and consciousness as being on the same (non) ontological level; it is a reduction of the appearance of 'something' to 'nothing'. For Buddhism, then, the empirical does not give insight into the actual or ultimate reality. However, and importantly, it does reveal the features of conventional reality. And by knowing conventional reality, one can come to understand the actual reality from which the conventional reality seemingly emerges. In this sense, the empirical is validated in as far as it can show us that conventional reality is not what it seems.

Aquinas's version of a hierarchical reality is different again. Because it does not conflate actuality and existence, an entity or substance is not 'actual' merely due to the fact it is extended in time/space. Rather it is actual (or real) because it is in a state of act due to its inherent form. Further nothing can bring itself into a state of act, but is brought from potentiality into act by another thing/event in a mode of

to-one correspondence between genes and biological functions' (2006, 9). Instead, he suggests, 'the genome needs to be read through the phenotype, not the other way around' (2006, 17). His reason for stating this is that 'functionality does not reside at the level of genes...Moreover, [the] environment crucially determines which genes are expressed and to what degree...this is a two-way interaction' (2006, 34–35). In other words, what we see in nature in fact goes against the idea that higher levels of reality can be exhaustively reduced to lower levels. Denis Noble himself suggests in his book that Buddhism might be such an alternative metaphysical framework.

act (apart from God who is the unmoved mover). This means the reality or existence of higher level entities are dependent on lower level entities, but they are also irreducible to the lower level entities because they have distinct forms and are themselves in a state of act. When reality is ultimately understood as modes of being and degrees of actuality, rather than material stuff extended in time-space, it redeems the concept of 'reality' from being solely understood as the physical or mere (Cartesian) matter. Reality is all of that which has being and is to some degree actual, including both the material and the immaterial (no longer thought of as belonging to two separate 'realms', where one is more obviously 'real' than the other). The physical is 'no more than a particular manifestation of actuality; complex actuality in motion, subject to alteration, generation and corruption' (Pasnau 2002, 131).

A Thomistic way of articulating the hierarchical structure of reality maintains that higher-levels are dependent on lower-levels. The nature of the higher-levels' dependency on the lower-levels is that the matter of a thing at higher levels is itself a matter/form composite. For example, the inherent capacities (due to the form/matter) of hydrogen and oxygen molecules enable, under certain conditions, the formation of H₂O (water) – which in turn has certain capacities and potentials to be further 'formed'. Thus, if the substances on the lower levels were any different, they would have different capacities and potentials and 'produce' different features at higher levels. And because for Aquinas the main feature of reality is being in a state of act rather than being extended in time-space, the dividing line between what is part of reality and that which is not part of reality does not go between the material and the immaterial, but rather between actuality and potentiality. This means that the 'higher' level features of reality—such as the mind or so-called 'immaterial' features, which normally are considered misnomers in the Cartesian framework—no longer are oddities whose existence must be empirically proven (as if the empirical equates to the real). In this alternative framework, these features are *not* capacities or functions of an immaterial substance nor ontological entity called the form; they are embedded in the being as a whole. For example, it is not the mind that exists or thinks; rather it is the human being as a whole who has the capacity to think. Therefore thoughts are real and

have causal influence not because they have a separate ontological status per se, but because they are inherent in the being itself, due to its form. On this view, then, the hierarchies of reality no longer ‘fit into’ the idea of exhaustive reduction to the smallest possible component.

Thus, both Aquinas and Buddhism provide ways of expanding the understanding of reality from one where reality is simply equated with the empirical, to notions of reality as standing in a particular relation to the actual and the empirical. Neither of the opposing views of Buddhism and Aquinas assume causation to be unidirectional, nor are higher levels collapsible/reducible into lower levels, like in the generic Physicalist account of layered reality. This accommodates for real complexity and emergence in a way the Cartesian framework cannot.

Matter and Causation

The difference between the Cartesian framework and the Buddhist/Thomistic frameworks regarding the question of reality has crucial implications for notions of matter and causation. When causation is understood in terms of events in a closed physical system—where ‘physical’ is narrowly defined as substance extended in time-space—it is impossible to make sense of the mental and the concept of persons. Based on their alternative articulation on the nature of reality and being, Buddhism and Aquinas both challenge this view of matter and allow for more nuanced and non-reductive views of causation.

In the current debate, matter is understood in terms of mathematical physics and material objects, which are related to each other by very specific notions of efficient cause.¹⁵² This quantitative view of matter excludes qualitative subjective experiences such as taste, colours, smells and sounds. In order to do science,

¹⁵² Though the limits of this understanding are to some extent being challenged by quantum physics and systems biology, the theoretical framework struggles to make sense of the findings precisely because of its limited conception of matter; ‘*For over thirty years that what gets counted as material by philosophers today is whatever we have success at understanding. Because we lack clear accounts of what matter is, what bodies are, and what the physical is, we simply take material beings to be whatever science constructs*’ (Pasnau 2002, 137). Dupré makes a further example of the call for a new way of conceptualizing matter and causation in the field of Biology. He shows that ‘*there are genuinely causal entities at many different levels of organization. And this is enough to show that causal completeness at one particular level [the micro-level] is wholly incredible*’ (as quoted by Stump 2003, 302–304).

physical objects have been recast in exhaustively quantifiable terms, and the outstanding features that cannot be captured in numbers have been allocated to the side line as features of the mind; mere sensory qualities that we ascribe to the world. Such features are commonly known as 2nd order features of reality, and because of the commitment to a mechanical-cum-materialistic view of the world they have become something of an oddity. This form of dualism between 1st and 2nd order properties is a feature of the Cartesian framework that is not found in Aquinas or Buddhism because of their different stance on the nature of matter.

As we have seen, at the very outset Aquinas understands reality to be more than the merely physical world as extended in time-space. Descriptions of reality based on the Cartesian framework only include the notion of matter as defined by physics, and hence potentially leave the understanding of matter and causation one-dimensional. For Aquinas, however, there is more to reality than its physical components. But this 'more than' is not a 'spiritual', 'mystical' or 'enchanted' kind of 'more' that is somehow added onto the physical base; rather, it is simply a refusal to conflate different aspects of reality. Corporeal reality is described as interplay between matter and form, and act and potency aspects in dynamic relation to their surroundings and to reality as a whole. A thing's configuration or form determines its properties, including its causal powers; its operations and functions derive from its form.¹⁵³ This view both breaks out of the flawed dichotomy of substance/non-substance descriptions of reality, and enables us to conceive reality as neither absolutely static nor as in constant flux. The physical 'thing' or substance is 'a dynamic centre for activity and receptivity. Every finite substance...is intrinsically relational, set in a matrix of the world systems as a whole'(Clarke 1994, 16). This draws on Aquinas's view of substances being the combining centre of a being's activities; a hub 'which is constantly pouring over

¹⁵³ The form is defined by what it does; that it makes what exists potentially exist in actuality. It is the shape or form that makes a particular lump of clay a cup rather than a sculpture, because the shape of a cup makes it suitable for drinking. And it is the ability to perform that function that makes the lump of clay a cup. Furthermore, the form itself is not set or particular, since it is defined by its function or role; it makes a thing suitable for a certain end, but does not restrict how the end might be realised. There are, for instance, many different types of cups: paper cups, cups with or without handles, thin bone china cups, hand-thrown ceramic cups, carved wooden cups, and so on. The form of a particular cup is whatever is such that by its presence, it makes something that is potentially a cup, an actual cup.

into self-expression through its characteristic actions and at the same time constantly integrating or actively assimilating all that it receives from the action of other substances on it' (Clarke 1994, 16). We might put it this way: a substance is matter in a particular yet dynamic configuration or form. This dynamic configuration includes not only static features of the thing, but also causal relations among its material components.¹⁵⁴ The existence of a substance is dependent on its form and matter. And this goes all the way down, so to speak, it is inherent to all of corporeal reality, even at the lowest levels. Hence, whatever our best physics might at any time find to be the lowest-level physical component, this view (following Aquinas) still understands that component as matter configured in a certain way by form.¹⁵⁵ Hence, the inclusion of form does not amount to a claim that some immaterial property or emergent side-effect is mysteriously 'added' to a biological system when its organisation reaches a certain degree of complexity. This challenges the conception of the reductionist causal chain, where all can be 'built' from the bottom up, and also sidesteps the cluster of problems faced by current accounts of 'emergence'.

In other words, while on today's account, matter is considered actual by default and so with no apparent need of form, Aquinas holds that since any substance has to be a conglomeration of form and matter, act and potency, matter is only *actual* when it has form. The distinction between actuality and potentiality is crucial here. In Aquinas's view, matter without form is pure potentiality and hence does not exist (as pure potentiality it has not been actualized, so how could it exist?). Potentiality is, in other words, rooted in what is 'actual'. One implication of this is that there are no 'free-floating' 2nd order properties: both what we currently describe as 1st and 2nd order properties equally adhere in the Thomistic form/matter composite. For Aquinas (as for Aristotle), sensory qualities or 2nd order properties are just one set of material features of the world alongside others, even if they cannot be described in quantitative terms. No wonder, then, that there

¹⁵⁴ 'A thing has the properties it has, including its causal powers, in virtue of having the configuration it does; the proper operations and functions of a thing derive from its form' (Stump 2003, 36).

¹⁵⁵ Aquinas calls this bottom level entity 'an element'. An element 'is constituted of matter and form, but if we conceptually strip away the form or configuration of an element, all that remains is prime matter, matter which cannot itself be decomposed further into matter and form' (Stump 2003, 37).

is a close correlation between these properties and various other physical properties. Of course, sensory qualities are unlike other features of the material world, but the point is that on the Thomistic view there is no good reason to think that all truly material attributes should be reducible to one quantifiable type in the first place (to insist that this must be so would amount to dogmatism).

The distinction between actuality and potentiality is what allows for change to occur. Change is the realisation of some potentiality in a substance brought about by some external influence. The form of a substance limits that substance's scope of potential to change. This implies that contrary to the Humean account of causation—which informs the Cartesian framework—the Thomistic view does not allow causes and effects to be conceived of as 'loose and separate', with no 'necessary connection' holding them together. For Aquinas, causes and effects cannot be separated from each other. Nor can material cause (what a thing is made of) or efficient cause (the instance that brings something into being) stand alone in accounting for change; formal cause and final cause must be included. By including all four causes in any account for an event or process, Aquinas allows different accounts of the same event to be mutually inclusive and equally valid. The notion of *telos* and formal cause provide features, now loosely considered 'emergent', a robustness they lack in the standard non-reductive physicalist accounts. The inclusion of formal and final (*telos*) causes further allows for a re-casting of the so-called problem of over-determination in Philosophy of Mind. Since the mental is no longer considered a foreign feature to reality or pushed to the fringes as a kind of (optional, of course, but really quite irrational) belief in fairies. In short, widening the conceptual scope of the notion of causality has great value. As Hacker puts it, 'once we allow categorically varied kinds of conditions to be cited in causal explanations, there is no reason to exclude the absence of expected or normal events, processes and conditions or the omission of acts or activities that might have been expected or required' (Hacker 2007, 89). This appreciation of different types of causes, without reducing it to material and efficient causes at the lower levels provides a metaphysical basis for rich explanations of real phenomena; for example an appreciation of how both qualitative and quantitative research

methods might provide valid and useful knowledge about reality without one necessarily being more true or 'real' than the other. In short, a Thomistic metaphysics allows for a description of reality that is not limited to a narrow empirical account.

The Buddhist account of matter and causation provides a very different position from the Thomistic one, since the former does not give substances any ontological status whatsoever. In a sense, it needs less detailed exposition, since the problem of what material things are and how they interact causally is not a question of ultimate reality in the first place. Buddhist philosophy is more concerned with exploring the notion of consciousness and experience as this is what makes up reality as we perceive it. Nonetheless, Buddhist metaphysics still allows for a richer notion of reality than the one provided in the Cartesian framework. First, this is because matter or *rūpa* —on the Buddhist account—is not the ultimate ontological category, but rather shares the same (non-)ontological status as a long list of other *dharmas*. Hence, reality cannot be described in purely material empirical terms: our very experience calls for a more inclusive approach. In the closely related case of causation, the Buddhist notion of Dependent origination shifts the focus from substances to the unstable characteristics of reality and how everything is always dependent on a matrix of previous events. This shift of focus stands in stark contrast to the Cartesian account of matter and causation, where material substances are seen as existing by default, and the relations between such self-existing things hence become problematic, invisible and beyond reach.

To summarize, Aquinas allows for a richer approach to the world by not conflating reality and the actual to a narrow understanding of the empirical. The Thomistic notion of form allows for a conception of material substances as more than entities extended in time-space. Avoiding the conflation of the actual with the material—whether as something accidental or as an unanalysable part of a substance—Aquinas leaves room for immaterial features of reality to be actual and so have real causal influence. Equally, but in a different way, Buddhism provides a richer account of reality by giving more than one category (matter as extended in time-space) as part of its account of conventional reality. This also provides for a more

dynamic account of causation as the notion of dependent origination portrays causation more like an interwoven web of contributing phenomena and not as a linear chain of separate events. On either view, the notion of matter stands in contrast to the Cartesian framework as it is not portrayed as inert and mechanical, but as dynamically unified configurations of form and matter, act and potentiality in the case of Aquinas, or as a configuration of the five *khandhas*. These ways of portraying matter allow for an understanding of an organism and complexity in a way the Cartesian view of matter does not.

Human Nature and the Mind

In contrast to the Cartesian framework, neither Buddhist nor Thomistic metaphysics view the mind (or consciousness) as a separate ontological substance with which the physical has to interact. Nor do they cast it as a feature diffused equally throughout all of (physical) reality as in Pan-psychism. Rather the mind is seen as intrinsically linked to the physical at a certain level of complexity. The person or a human being is not *essentially* a rational mind or soul, so that the body might be thought apart from this; instead human beings can only be understood as psycho-physical conglomerations (in Buddhist terms) or as a form/matter unity (in Thomistic terms), more precisely human beings are substances, i.e. form/matter and act/potency components in dynamic relation to their surroundings and to reality as a whole. This stands in stark contrast to the Cartesian and commonly held view that the essential feature of human nature is rationality. While Aquinas called the human form a 'rational soul', it is important to note that his meaning of 'rational' and his understanding of the intellect are richer than the narrow definition of the rational as critical analytic reasoning. Human nature cannot be limited to the rational mind, just like it cannot be reduced to mechanistic physical processes. We will not have an understanding of the defining essence of human nature as soon as (some day in the future) we have perfectly managed to replicate all of the neurons in the brain and their lawful behaviour. First, the act of thinking is never reducible to neurons 'firing' in the isolated brain; it is a vast and complex process of neurochemicals and hormones throughout the body interacting with other components of the brain and with the rest of the body, mutually influencing emotions, memories of previous experiences, intentions, as

well as relationships, lifestyle and environment. For instance, the emotional often outweighs the strictly 'rational' in decision-making processes. Neither can the mind be limited to the brain, as is rightly argued by the 'embodied cognition' movement.¹⁵⁶ Without a body, and Aquinas would add a body of *a particular kind*, there can be no cognition. Hence, the body should be seen as an integral part of human nature and personal identity.

In a Cartesian framework, the individual is the primary unit, finding its identity and individuality in itself rather than in or through its relations. In the Buddhist or Thomistic frameworks, by contrast, it is ambiguous if it is the individual or the social which is 'primary' because of their complex causal interactions. To be a human person is always-already to be in community, and in relation to the environment and the transcendent. In contrast, Cartesian dualism, soul and body are both complete substances: they separate from each other. The essence of a person is ultimately found in the soul alone—this is the person's 'real self'—and the body is merely a mechanical shell. This set-up then leads to questions of whether or in what sense one is dealing with the same person over time, for while one might observe their bodies one cannot observe their souls – the 'real' them. This problem does not even arise in Buddhism. That is they dismiss the *problem* of continuous identity as a real problem and embrace it as a fact. In terms of what is ultimately real, Buddhism makes this issue even more poignant: it observes and accepts that there is no stable self whatsoever. A baby is *not* the same as the child or the adult it grows up to be, it only appears to be that way because of certain arbitrary continuities in the ultimately real flow of change. Likewise for Aquinas, this problem does not even arise. There simply cannot be matter without form – no body without a soul. Furthermore, since the soul is the form of your body your specific body cannot be present without your soul 'being there' too. For Aquinas, a

¹⁵⁶ The field of Embodied Cognition, for instance, highlights three ways in which our standard notion of mind in the brain is falling short. The first one is concerned with how we conceptualise reality. An organism's body limits or constrains the concepts that this particular organism is able to acquire. In other words, the organism's body defines its conceptual understanding of the world, different bodies mean different understandings. Secondly, there is a critique of the representational process, which is viewed as the core of cognition. There is reason to think that an organism's interaction with the environment replaces the need for algorithmic processes over symbolic representations. Third and finally, the body makes up a constitutive part of cognition. It does not play a merely causal role in the cognitive process. Cognition is dependent on a body (Shapiro 2011).

human being is necessarily an embodied person, more specifically with a body of a particular kind. Furthermore, the Thomistic notion of *being* allows us to understand the term 'person' as integral; that is to say, not as a mode of being, or a kind of status, applied from the outside (for instance, that someone must be recognized as a 'person' in order to be one), but as a consequence of its own act of presence or fullness of being. A person is then understood to be 'a bi-polar being that is at once present *in itself*, actively possessing itself by its self-consciousness (its substantial pole), and also actively oriented *towards others*, toward active loving, self-communication to others (its relational pole)...Person is essentially a "we" term. Person exists in its fullness only in the plural' (Clarke 1992, 610). A human being cannot be reduced to a mere mind trapped in a brain isolated from its surroundings and relationships.

In light of this, the kind of thought experiments concerning brains-in-vat and zombies that have become common in contemporary philosophy of mind fail to make the slightest sense in these metaphysical frameworks, since neither a brain/mind on its own or a body without a mind would be considered human beings/persons. Neither do such thought experiments fit their respective conceptions of matter, causation, and what it is for something to be what it is. For example, in Buddhism the idea of a body with no soul, for example, a zombie, does not make sense, as human beings do not have a substantial soul in the first place. This does not however mean that Buddhism takes human beings to be zombies per se— rather they see human beings, as compositions of five *kandhas*, to take consciousness or one of the other *kandhas* out of the composition would make it into something different to a human being. If anything, such thought experiments would only say something about brains-in-vat and zombies and nothing at all about human beings. In other words, if either of the two alternative metaphysical frameworks was substituted for the Cartesian framework, the reduction of a human person to processes in the brain sustainable apart from a body or a body able to go on functioning without a mind, and so on, would be inconceivable in the first place. On the contrary, a person would have to be considered not as an individual immaterial self locked within an inner mental space (within a body); the very notion of personhood itself would have to be understood as *including* a body

of a particular kind together with the physical and social environment in which an individual is in relationship.

In sum neither Buddhism nor Aquinas, due to their conception of reality, matter, and causation have a mind/body problem or a problem of overdetermination inherent in their view of human nature. Neither of them start from the postulation of a gap which is then bridged, nor the possible reduction of 'emergent' or epiphenomenal levels to lower 'physical' levels. Instead, it sees what is now called the 'mental' as an integral part of a human body (and of reality). Crudely put, to have a soul (for Aquinas) or the suitable configuration of the five *khandhas* (for Buddhism) is simply to be a living thing in contrast to an inanimate thing. The vital and opposing difference between Buddhism and Aquinas here is that while Aquinas takes the human being (soul/form and matter) to be a distinct substance, Buddhism does not consider a human being to be an ontological distinct entity but upholds ultimately a view of not-self and impermanence as fundamental. To be a human being is to be an 'ensouled' body (Aquinas) or a constellation of *khandhas* (Buddhism) with the characteristic human capacities and potentialities. A dead human being—that is, a human being without a soul (Aquinas) or lacking one of the *khandhas*—is not by definition a human being, but a corpse (since it has a different form with other capacities and potentialities). Likewise, a soul without a body or *rūpa* is not a Disneyesque 'ghost' resting in the body and hovering away from it when the body dies; it is practically as inconceivable on these frameworks as would be a living body without a particular configuration or soul.

An Overview

The above has considered three very different metaphysical frameworks; the Cartesian, the Buddhist, and the Aristotelian/Thomistic, and argued that the two latter offer alternative (though quite different) routes out of the impasse experienced in a contemporary field of philosophy of mind still largely shaped by the former. Both these frameworks entail a richer understanding of matter and causation, which again provides a better foundation for understanding complexity and non-reducible features of reality in a way that does not from the outset ostracise the 'mind'. Substances are no longer understood in purely mechanical

terms or defined in terms of the at-any-time-best-available physics – instead, an existing substance is by definition a union of matter and form. The hierarchical view of reality, shared both by reductive and non-reductive approaches, has been redefined so that it is genuinely non-reductive beyond mysterious ‘emergent’ properties. Hence, the black sheep of ‘mentality’ is no longer pushed to the fringes, but fully embedded in the body in a non-reductive fashion. It is not the mind or the body per se that is solely the site of thought, but the human person as a whole. Furthermore, the human being does not think in isolation, but in a context and community.

In short, if we are to move forward with the mind/body problem this thesis suggests we first take a step back and reconsider our view of human nature in light of a larger metaphysical framework. Now, what exactly would be the implications of adopting these alternative frameworks is something that would have to be worked out in the various disciplines and sciences – a project that goes beyond the scope of this thesis and the work of a single scholar. However, as this thesis has argued, first, by showing that the current problems in philosophy are rooted in a particular view of reality here called the Cartesian framework, and secondly, by looking to non-Cartesian alternatives, there are other ways of understanding human nature available. In general it can be said that fully rejecting the basic assumptions shared by reductive and non-reductive physicalism alike—namely their views on matter, causation, reality, and actuality—these frameworks in fact present a better alternative altogether. It is the end of the mind/body problem, as we know it.

Conclusion – Back to the Drawing Board

Giving a detailed account of an alternative metaphysics to the Cartesian framework must be left for another project. However, on the basis of the previous chapters it is possible to outline some basic assumptions that could provide a foundation for a ‘new’ metaphysics. The following sections articulate some of the tentative starting points of re-articulation of the metaphysical framework, akin to the list Velmans made regarding the presuppositions of the Cartesian framework mentioned in chapter 2. The various points will not be developed in length due to the space limitation of this project, but are meant to mark areas that need to be continuously re-visited at later stages. This will draw to an end with a slightly more fleshed out description of human nature, as this has been the main motivation for the thesis in the first place.¹⁵⁷

¹⁵⁷ Because of the limited scope of this section, the following is based on a substance ontology as found in Aristotelian/Thomistic metaphysics, rather than in Buddhism. Although a similar list could be made from a Buddhist perspective. (Obviously, there could be personal reasons for this preference. A dedicated Buddhist might retort that I have misapprehended Buddhism—already a too generalised notion—in the sense that this thesis itself is seeking to speak of its philosophy in terms of more or less fixed categories.) However, this does in no way mean that Buddhist philosophy or practice can be dismissed in an off-hand way, or that it is not possible to do similar things starting from a Buddhist framework. A motivating force behind this thesis itself is the perceived need for a metaphysical framework that might help ‘save the appearances’ of contemporary pragmatic and complex therapeutic and health-political practice. Buddhism is a vast and incredibly complex philosophical tradition that only in recent years has been seriously engaged with both in philosophical and therapeutic settings. Indeed, many ideas and concepts found in Buddhist metaphysics might be helpful merely by virtue of challenging the Western status quo as well as in providing alternative solutions. Yet, Buddhist practices of ‘mindfulness’ and so on are sometimes adapted in therapeutic contexts without consideration for their underlying ontology, or any sensitivity to metaphysical consistency and coherence. This suggests a strong need for precisely the kind of approach left out here since beyond the scope of this thesis.

Here, however, both my own intuitions and the aims of the thesis (obviously connected) tend instead towards a Thomistic framework. The main reasons for thus taking a substance ontology stance include my personal commitment to the following: a realist view of reality; a general affirmation of the material world as fully real; and an understanding of unity that allows for the recognition of distinction and difference as real features of extra-mental things. The importance of the latter is expressed in the notion that while it is correct that everything is connected and interrelated, *distinction* is still real and actual. There are distinct ‘things’ in reality, and these are *not* ultimately arbitrary cognitive projections overlaying an ever-changing flux. Human-made categories are not a violation of the nature of ultimate reality-as-One, nor a grasping that per se introduces change and thus causes suffering. Rather, distinctions are a partaking and affirmation of reality as real and good, simultaneously in union *and* containing distinctions – yet never in a static dichotomy. While flux and change, in the (Christian) Thomistic tradition are recognized as painful to the point of death and indeed might cause suffering, this is not the ultimate defining feature of reality: change understood in terms of growth or maturation, new life, and indeed resurrection, remains part of the picture. Though both Buddhism and Aquinas recognize the reality of suffering

1. Actuality is the basic feature of reality, and every thing that is real is because it has been brought from potentiality into act by another thing/event in a mode of act (apart from God who is the unmoved mover).
2. Reality is that which is in a state of being or act (with inherent potentialities which can be brought into act). The natural realm is additionally constituted by form and matter, that is 'every natural body is one substance composed of two incomplete substantial principles, related to each other as potency to act, and called prime matter and substantial form' (Boulter, *Scholastic Principles*). When reality is ultimately understood as modes of being and degrees of actuality, rather than material stuff extended in time-space, it redeems the concept of 'reality' from being solely understood as the physical or mere (Cartesian) matter. Reality is all of that which has being and is to some degree actual, including both the material and the immaterial (no longer thought of as belonging to two separate 'realms', where one is more obviously 'real' than the other).
3. Substances exist in reality, not as merely mechanical spatio-temporal objects; instead, as they stand in relation to the rest of reality, they are bundles of act and potentiality.¹⁵⁸ The physical cannot exist without act; matter and form are intrinsically entwined. A substance's form or configuration shapes or enables the capacities and the functions and causal powers of that substance.
4. Reality is layered. That is higher levels are dependent on their lower-level substrata to be brought into act. However, due to the notion of form (and to a degree the idea of *esse* and *telos*) these higher level entities or phenomena cannot be exhaustively reduced to their lower level constituents.

(albeit in different senses of 'reality'), their ideas of what the *telos* or end goal is appear starkly different. On comparison (always limited, but nonetheless helpful) the Thomistic and ultimately Christian view seems able both to affirm reality as we experience it as fundamentally good, as well as providing hope and genuine motivation for actively engaging with various forms of change and improvement – for instance in terms of social action or scientific endeavors. It grounds and embeds the human being in particular environmental and social contexts to which it belongs and has certain obligations towards – ones that even reach beyond its own limitations.

¹⁵⁸ A substance's properties (both actual and potential) are then dependent on the constitution of the stuff or the nature of the thing, completely recasting the issue of 1st and 2nd order properties.

5. Reality is knowable. The process of coming-to-know involves a constant engagement with a complex reality that is ‘actual’ and that is, however shaped by our senses, cognitive apparatus, and technology, observable and accessible to us. We can give knowledgeable accounts of reality that are useful, reliable and coherent, even when this knowledge is always fallible, limited and incomplete. The process of acquiring knowledge is culturally and historically situated and can be distorted to varying degrees at every stage – whether it is the initial questions, methods of inquiry, or the explanations derived from (or applied to) the data. So while we might not be able to find any static and ‘detached-from-any-particular-perspective’ truth about reality as such, we can still know and explain reality with a sufficient degree of certainty and compare various theories of reality to each other arriving at a best account – until a better one comes up.
6. Change is possible because beings are composed of potency and act. It allows for a dynamic understanding of a thing as being in constant change—and in relation to its surroundings—while still being the thing that it is. A complete account of change needs to include all four notions of causation; formal cause, final cause, efficient cause, and material cause. Furthermore, since the dynamic form of a substance *includes* its causal relations and properties, as we have seen, top-down causation in higher-level substances and phenomena ceases to be mysterious.¹⁵⁹
7. Like any other entity, human beings are substances, i.e. form/matter and act/potency components in dynamic relation to their surroundings and to reality as a whole. (Without a physical presence we are by definition not human beings at all.) That is we persist as individual things classifiable into different kinds corresponding to distinctive features and abilities in accordance to our form or soul.¹⁶⁰

¹⁵⁹ ‘A thing has the properties it has, including its causal powers, in virtue of having the configuration it does; the proper operations and functions of a thing derive from its form’ (Stump 2003, 36).

¹⁶⁰ Pasnau describes the relation between soul and body in the following manner: ‘To say that human beings are bundles of activity is not to say that we are entirely souls, or that we have no bodies. My soul is less than the sum of my actuality, because my soul is identified only with the actuality that gives me life. Moreover, my body is more than just prime matter, because the body is matter actualized in various ways (in my terms, the body is various sorts of material actuality)’ (Pasnau 2002, 139).

8. In distinction from inanimate substances, but like other living substances such as animals, human beings are animate or have a *psūchê*.¹⁶¹ The *psūchê* is a biological concept, *not* an immaterial one as in Plato or Descartes. It designates the activities of a *living* thing or substance. More specifically, it is ‘the set of potentialities the exercise of which is characteristic of the organism’ (Hacker 2007, 22).¹⁶²
9. To be a human being means to be an animal with a particular set of capacities: capacities to think, to feel, to reason, to act and to be self-conscious. These capacities are, like in other animals, dependent on a normal functioning brain. However, a human being is not therefore reducible to a brain confined in the cranium, nor is it in any other way *identical* to its body. Nor is a human being essentially *identified* with the specific set of abilities that distinguishes it. In short, it *is* not its mind. Most importantly, a human being is not any kind of union between a mind and a body interacting in a specific unknown manner. It is not the mind that thinks, and then in turn moves the body/brain (an idea found both in Cartesian Dualism and in ‘the problem of overdetermination’). Rather, it is the human person as a whole that has the capacity for thinking. More precisely, ‘action’ is not located in a part of a human body, brain or neurological pathway, but on the very level of *being*: it is the human organism as a whole that is an agent.
10. A normal functioning human person is ‘a self-conscious agent, with the ability to act, and to react in thought, feeling and deed, for reasons’ (Hacker 2007, 15). We belong to moral communities, and are moral agents or persons because we always-already live in relation with other persons.

¹⁶¹ It is important to note that Aquinas’s conceptual framework does not require a kind of ‘spiritual’ conception of human nature; indeed it does not rule out materialism. Aquinas’s understanding of the soul is dependent on the matter it configures, i.e. there is no human soul prior to the body, somehow imposing itself on its substrate matter. Rather, given the right potentialities and context (i.e.- a fertilised embryo), a human being can be brought into actuality. Whenever a living human body is present, then so is by necessity the soul.

¹⁶² Like plants, human beings take nourishment from other material substances, which provide us energy for growth, our characteristics, activities and reproduction. As sentient animals, human beings are self-moving and have sensory capacities providing information about their surroundings, and they behave according to the demands and dangers they perceive. The perceptual faculties are cognitive—another fundamental difference from the Cartesian view, where senses are entirely ‘bodily’—and provide, alongside the ability to move, the foundation for agency.

Thus, an understanding of human nature must *include* (rather than simply add as secondary–albeit important) even the environments and contexts in which humans live.

The empirical/physical (as defined in the Cartesian framework) is no longer the defining feature of reality and existence, because unlike Cartesian matter (which is confusedly considered actual simply by default), a material substance, for Aquinas, is ‘complex actuality in motion’ or a form/matter composite. The physical is then the sphere which we can observe either directly or indirectly, but it neither equates to, nor does it provide an exhaustive description of, reality as such. Consequently the hierarchical view of reality that is portrayed in a Thomistic metaphysics sidesteps the problem of reduction as described in chapter one. Because of the understanding of form/matter and act/potentiality higher-level entities and phenomena are provided with a robust ontological status that is not in conflict with an acknowledgment of dependence on lower-level entities. The Thomistic conceptualisation of reality as layered, paired with the nuanced understanding of the four causes and the understanding of the relationship between form and matter further dissolves the problem of mental causation. There is no mind or brain, which does the thinking per se, rather cognition is a capacity of a human being. The soul is not a ‘thing’ attached in some way to the body – it is the form of the body. In other words, the essence human nature cannot be described by looking exclusively at the rational mind, although human beings do indeed have rational abilities. Nor is the essence sufficiently captured by a (postulated) complete description of the ‘physical’ components making up a body or brain, although without these a human being would not exist. This framework places the rational human being firmly in the body as an integrated organism, and sees human beings as intricately linked with their context and environment. The notion of form/matter substances in general, and in particular in regards to the human person, also recasts the problem of self and personal identity. You are who you are in virtue of having the body you have, which has been brought into a state of act by the form. Identity is retained through change due to the distinction between *accidental* and *substantial* change. In short the problems described in chapter one as haunting the debate in contemporary Philosophy of Mind are not even on the

map in a Thomistic framework. So while there are other problems that arise within the Thomistic framework—such as where does the form come from, how does a form of inert matter ‘become’ a kind of form denoted as a ‘soul’, and how is unity ensured when an entity is said to consist of form and matter, and act and potentiality—there are enough suggestions that this metaphysical framework has warranted a reconsideration.

The above is obviously a mere sketch. The proposed views will need a lot of refinement and they need to be brought into dialogue with the sciences. However, it is hoped that starting from these considerations—fundamentally different from the foundations of the Cartesian framework—might allow us to develop a much richer notion of human nature. An understanding that not only makes the mind/body problem irrelevant, but that also might have significant and fruitful application in a number of disciplines, areas of policy making, therapeutic, and clinical contexts where human beings are the main concern.

Epilogue

This thesis has examined the conceptual framework within which contemporary philosophy of mind operates, in particular the questions concerning the mind/body problem. Rather than seeking to solve the mind/body problem or provide a full-blown ontology of the mind and the mental, it has investigated the underlying metaphysical premises that provide the terms and limitations of the debate itself. Articulating these often unarticulated and implicit assumptions, it has insisted that the situation could be otherwise, thus opening up potential new avenues for future debates. In this sense, the thesis recasts the mind/body problem, showing that this is—in its contemporary form and conceptualization—a distinctly modern and Western problem rooted in the Cartesian framework. By way of a historical diagnosis of the Cartesian framework, and a comparison with alternative non-Cartesian and non-Western frameworks, the thesis has argued that these premises are neither universal nor necessary. Heightened awareness of historical intellectual heritage, together with exploration into alternative metaphysical frameworks, both brings the current challenges into sharper focus, and provides helpful starting points for a re-imagining of the pool of available options for contemporary philosophy of mind. Finally, the thesis has provided a tentative outline of some of the issues such an endeavour must take into account: conceptions of reality, the physical, causation and human nature. Not only does this sidestep reductive physicalism and non-reductive physicalism alike—by rejecting their shared fundamental assumptions—it might provide a richer and more fruitful alternative.

In order to make this argument, it has been necessary to simplify both historical and metaphysical complexities. Of course, the current debates are immensely rich and sophisticated, and indeed there are some signs of a growing recognition of the issues at stake – the Embodied Cognition Movement and the revitalizing of Panpsychism theories come to mind (no pun intended), both of which possibly

warrant more attention than this thesis has been able to offer. In order to limit its scope, but also in order to make its argument, it has had to instead focus on the mainstream of the debate, where various versions of materialism still provide the most widely shared conceptual toolkit – non-reductive physicalism being most prominent. Likewise, its descriptions of the underlying presumptions of the debate are not exhaustive, but hone in on the defining features important for the understanding of human nature. Seeking to uncover how contemporary thinking might have been different, the historical genealogy has had to make sweeping generalisations, glossing over, ignoring, or simply missing possibly important details. In the part presenting alternative metaphysical frameworks, Thomistic and Buddhist metaphysics were chosen, first because they fit the bill in terms of being non-Cartesian and non-Western and secondly because there is a rising interest in these two metaphysical frameworks, but other such frameworks might conceivably have been chosen as examples instead. Furthermore, while the thesis makes a genuine attempt to give a more in-depth account of both Thomistic and Buddhist metaphysics than often found in the contemporary debate, the obvious constraints of the thesis makes it impossible to do full justice to either of these vast and rich metaphysical systems.¹⁶³ For the sake of clarity as well as word length, many elements and aspects have been glossed over or simply left out, possibly at the cost of giving critical readers a mistaken impression of the two as being unsophisticated and unserious contenders for their philosophical attention. Hopefully, the accounts are sufficiently detailed for their specific purpose, namely to point out how both represent viable options to the metaphysics underpinning the Cartesian framework. Once this point is accepted, further details can always be explored. In short, the thesis is inevitably vulnerable to the common accusations that often meet unapologetically inter-disciplinary projects: it generalizes, glosses over, and leaves out details that some find vital, while including details the same readers might find unnecessary or irrelevant.

Nonetheless, this interdisciplinary approach provides truly alternative perspectives that both challenge and enrich, stressing that the given point of departure for our thinking and our exploring needs to be scrutinized; if the

¹⁶³ In particular the generalized notion of Buddhism.

foundation is flawed, anything built on it will be lopsided. Taking a bird's-eye view this thesis seeks to put the current debate in perspective, showing that for all their apparent differences the alternatives in play have remarkably much in common. It thereby also avoids being caught up in detailed discussions about brain transplants and the like which might be based on flawed premises. To put it in other terms; instead of solving a single corner of a Sudoku puzzle, the thesis insists on the importance of attending to the bigger picture.

Current philosophy of mind, psychology and neurosciences can only benefit from a heightened historical awareness about the premises that are too often simply taken for granted – as made clear in the DMS-IV admittance to confusion surrounding conception of 'the mental'. But rather than trying to tackle that issue, they concede that 'unfortunately the term persists in the title of DSM-IV because we have not found an appropriate substitute' (American Psychiatric Association 2000, xxx). Historically tracing core concepts such as the mind, self, soul etc., thereby showing how we have arrived at our current understanding (or rather confusion) concerning the body and the mind is necessary in order to clarify the discussion, and rectify potential errors. By providing such a historical untangling as part of its argument, this thesis enables a clearer conversation and reassessment of the current *status quo*. Similarly, by articulating more precisely what the defining features of the Cartesian framework are and how it still defines the way the mind and the body are conceptualized, this thesis spells out what is often taken for granted, but seldom or never properly defined. Neither blaming Descartes nor simply expressing off-hand dismissal of Cartesian dualism will ever solve the issues at hand; the conceptual confusion still persists. The problem goes beyond the notion of an immaterial substance, but is also tied up with the understanding of reality, matter, causation and the individual in general. By doing this conceptual groundwork this thesis prepares the way for new perspectives to be tried out as well as for better *understanding* of empirical data, all of which in turn are vital for developing policies in for instance health care or developmental work.

Furthermore, an interdisciplinary approach of this kind realizes that a genuine

dialogue between different fields is deeply necessary in order to gain a coherent understanding of human nature. Philosophy needs to critically engage with and learn from psychology and neuroscience; likewise psychology and neuroscience need to engage with philosophy and metaphysics. To put it crudely, modern Westerners must be willing to learn from their pre-modern forebears as well as their non-Western neighbours. This thesis makes a small but honest attempt at such a dialogue – making serious effort to truthfully portray the current debate in philosophy of mind with its implicit metaphysical commitments, and endeavouring to genuinely understand and portray Buddhism and Thomism as two viable alternative metaphysical frameworks. It does not dismiss these after a short critique, but allow them to ‘speak back’. In that sense this thesis is not about defending and propagating its own comfortable position, but strives to step out towards something genuinely different. In this way, it allows for actual reconsideration of the Cartesian Framework, and sincere appraisal of the potential contributions these alternative metaphysical frameworks might have.

Finally, the hope of the thesis is that a fresh and more integrated view of human nature might be articulated; a different ‘non-reductive’ understanding of humans as embodied creatures situated in community/culture and environment. A recognition of human nature nested in a greater understanding of being, reality, the physical and causation. While the details still need to be fleshed out across the disciplines, the aspiration is that such a view might make better sense of the data coming from areas such as Embodied Cognition, Systems Biology and Psychoneuroimmunology, refusing to push to the fringes or eliminate altogether vital features of human experience. Hence, and crucially, doing this kind of conceptual untangling is consequential beyond the metaphysical discussion, as it can provide a new way of making sense of the disconnect between the mental and the physical so perplexing in the fields of psychology and neuroscience. On this note, the kind of interdisciplinary dialogue advocated and practised by this thesis is necessary, not only for the sake of greater intellectual consistency, but also for the sake of real people needing real therapeutic assistance. In light of these contributions, the inevitable limitations inherent to an interdisciplinary and synthesizing approach are, it is hoped, a price well worth paying.

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