

DEPARTMENT OF PHILOSOPHY

A THESIS PRESENTED FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

Nouism

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Abstract

Views of a sort that mirror Physicalist ones, by claiming that there is fundamentally just mental stuff, have been called Idealist, with George Berkeley being one of the most notable defenders of such views. Within this thesis I distinguish between two parts of Berkeley's view. First, the claim that there are fundamentally just minds or spirits (labelling views that make such claims as 'Nouist'). Second, the claim that there are only perceptions and no material things. The view outlined in this thesis is Nouist, sharing the first claim with Berkeley, but rejecting the latter claim that there are only perceptions and no material things. Nouist views do not need to embrace Berkeley's rejection of the material, where 'material' is understood as something besides God and the perceptions that is behind the perceptions and explains them. Herein I show how such a Materialist Nouist view may be developed, some of the ways we may re-interpret certain philosophical topics through a Nouist lens, and discuss how such views may fare no worse (and occasionally better) than Physicalism.

Declaration

This thesis is an original work of my research and contains no material which has been accepted for the award of any other degree or diploma at any university or equivalent institution and that, to the best of my knowledge and belief, this thesis contains no material previously published or written by another person, except where due reference is made in the text of the thesis.

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A great thanks to my supervisors Graham Oppy and Monima Chadha, who provided continual and very helpful feedback and support throughout.

Also to my wife Amanda for enabling me to undertake and complete this project.

And finally, to Joshua Esselbrugge for creating the art to dramatically improve on my hand/mouse-drawn pieces (one of which can be seen below).

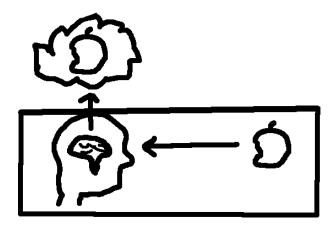


Figure 1: Original Hand/Mouse-Drawn Art

Contents

| 1 | Intr | Introduction 1 | | | |
|---|--------------|--|----|--|--|
| | 1.1 | Nouism Introduction | 1 | | |
| | 1.2 | A Taxonomy | 4 | | |
| | 1.3 | Comparison to Dualism | 7 | | |
| | 1.4 | 'Nouism' and not 'Idealism' | 10 | | |
| | | 1.4.1 Naming Nouism | 11 | | |
| | | 1.4.2 Nouism Then and Now | 14 | | |
| 2 | Ber | Berkeley and Materialism 17 | | | |
| | 2.1 | Situating Berkeley's Idealism | 20 | | |
| | 2.2 | Why Nouism and not Physicalism | 22 | | |
| | 2.3 | Why Materialist Nouism and not Identity Nouism | 23 | | |
| | 2.4 | Kant's Distinction of Appearance and Things | 31 | | |
| | 2.5 | Final Remarks | 32 | | |
| 3 | Phe | Phenomenology 33 | | | |
| | 3.1 | The Physical and the Phenomenal | 41 | | |
| | 3.2 | The Phenomenal List | 47 | | |
| | | 3.2.1 Beliefs | 51 | | |
| | | 3.2.2 What's left for minds | 55 | | |
| | | 3.2.3 The Cloud | 55 | | |
| | 3.3 | Bringing It Together | 56 | | |
| | 3.4 | Terminology | 58 | | |
| | 3.5 | Phenomena Come Interpreted | 59 | | |
| | 3.6 | Final Remarks | 61 | | |
| 4 | $Th\epsilon$ | e Nature of Matter | 63 | | |
| | 4.1 | Disagreement on Matter | 65 | | |
| | 4.2 | Agreement on Matter | 67 | | |
| | 4.3 | Linking Blueprints to Experiences | 71 | | |
| | 4.4 | Two Senses of Perception | 75 | | |
| | 4.5 | Final Remarks | 78 | | |

CONTENTS

| 5 | \mathbf{The} | Universe and Science 80 |
|---|----------------|--|
| | 5.1 | Time, Laws, and the Blueprint 80 |
| | 5.2 | Nouist Ontology |
| | | 5.2.1 Mental and Physical Causation 85 |
| | 5.3 | A Causally Open Universe |
| | 5.4 | Science |
| | | 5.4.1 Science and the Blueprint |
| | | 5.4.2 Science and the Brain |
| | | 5.4.3 Science and Memory |
| | 5.5 | Deception |
| | 5.6 | Ghosts and Gods |
| | 5.7 | Final Remarks |
| 6 | The | Self, Liberty, and Morality 107 |
| | 6.1 | Reference and the Self |
| | 6.2 | Freedom and Morality |
| | 6.3 | Final Remarks |
| 7 | Vari | iations 122 |
| | 7.1 | Broad Variations |
| | | 7.1.1 Unity |
| | | 7.1.2 Hierarchy |
| | | 7.1.3 Democracy |
| | 7.2 | Nouist Variants and Criticisms |
| | , | 7.2.1 The Simple Rule Weakened |
| | | 7.2.2 No Blueprints |
| | | 7.2.3 Asymmetry of Powers |
| | | 7.2.4 Unlink Minds and Bodies |
| | 7.3 | Final Remarks |
| 8 | Con | aparing Theories 139 |
| 0 | 8.1 | Physicalism |
| | 0.1 | 8.1.1 Physics and Physicalism |
| | | 8.1.2 Dependence on the Physical |
| | 8.2 | The Similarities |
| | 0.2 | 8.2.1 Science |
| | | 8.2.2 Psychological States and the Brain |
| | | 8.2.3 Simplicity and Commitments |
| | 8.3 | The Differences |
| | 0.0 | 8.3.1 Accounting for the Other Substance |
| | | 8.3.2 The Birth of a Mind |
| | 8.4 | Final Remarks |
| | U.T | |

Chapter 1

Introduction

1.1 Nouism Introduction

This thesis presents a detailed and developed description of one view among a class of views that I call Nouist. These are views that take the mental, specifically *minds*, to be fundamental: as the atomic substances of the causal world. Matter does not have an independent existence from minds. It's not merely the claim that matter depends at least in part on minds – say, that matter has an 'inert' existence without minds to suffuse it with something more. No, it's the claim that matter depends *wholly* on minds. According to Nouism, material things have *no* existence outside minds.

This may seem at odds with our initial reaction, that of course there exist material things independent of minds. Examples are abundant and plain to see – trees, rocks, cars, and so on. As compelling as it may sound, this initial reaction is misplaced. Following a line of reasoning that mirrors Descartes' sceptical argument in the First Meditation (Descartes 1641/1996), might there not be the appearance of a world of trees, rocks, cars, and so on, without such a world existing independent of any mind? The world appears to be a certain way, and that appearance is what we need to explain. It is a further claim that goes beyond the evidence to say that there is indeed a mind independent physical world behind the appearances, a physical world whose structure is appropriately related to the way it appears to us to be. In terms of evidence, the evidence we have before us of the physical world is that of the appearances, and that is what our theories need to make sense of. One way to make sense of them is the common Physicalist account, where we postulate the existence of a physical world independent of any minds that has a structure that in part resembles the structure implied by the appearances (though the story is far more complicated than this simplification suggests). It is not the only way, and the project of this thesis is to present another way to make sense of the appearances.

As a mirror to the Physicalist placing the physical at the foundation,

Nouism places minds at the foundation, minds which are having experiences as of being in a physical world. Defining a term like 'Physicalist' is difficult, not the least because different people simply mean different things by the term. Rather than defining 'Physicalist' and related terms precisely, it is sufficient for the reader to know broadly which views I am referring to. Roughly put, the Physicalist thinks that the physical is sufficient to explain the relevant class of explananda we are interested in, and the Nouist thinks that the mental is sufficient to explain that same class of explananda. Each of these views (Nouism and Physicalism) might assume the existence of that which they claim is fundamental, or they might think that there is some deeper story about why such things exist (e.g., that they exist out of necessity). Our concern isn't at the level of explaining the origin of either mental stuff or physical stuff. Rather, we simply presuppose the tools that each claims in their toolbox (physical stuff for the Physicalist, and mental stuff for the Nouist), and see how far our explanations of the evidence can go with those tools. The claim of the Physicalist is that we can get the mental (or explain away the mental) given fundamentally just physical stuff, and the claim of the Nouist is that we can get the physical (or explain away the physical) given fundamentally just mental stuff. These are theses that are intended to explain a particular class of explananda, the world of trees, stars, experiences, change, and so on, but not the world of, say, numbers, or logical truths. When I talk about the Physicalist claiming that the physical is fundamental, and the Nouist claiming that the mental is fundamental, the claim about 'fundamental' might be seen as a claim that these substances lie at the foundation of the *causal* world.

That's the brief introduction to the kind of view outlined in this thesis. In this thesis, I outline and describe a particular Nouist view. It is a sketch of a Nouist view, one of many possible variants, some of which will be explored in Chapter 7. This particular Nouism has God and other minds, and God impresses upon those other minds experiences as of being in a world like ours. In this way, the physical world we find ourselves in is a world that exists, so to speak, as an 'idea' in God's mind. Minds, on this view, have a 'Theatre of Consciousness' (p. 84), and are able to impress experiences on other minds. Separate streams of consciousness are separate minds. Importantly, the type of mind God is and the type of mind satellites are, are treated as the same, an experimental claim that we will revisit when we consider possible variations in Chapter 7. This is a preliminary assumption (almost certainly to be discarded or refined as part of a more fleshed out Nouist position) to see how far we can get by giving God nothing more special than his ability to communicate with satellite minds directly, while they cannot communicate directly with each other. There are many other ways than this to flesh out a Nouist view, and those views carry with them their own virtues and flaws. There may be views with many or few minds, views with or without anything that could reasonably be called God or a god, and views that characterise minds and give them different powers and properties – even allowing one mind to have many streams of consciousness, or share a stream across many minds, or to say that some minds cannot have experiences or cannot impress experiences, and so on. The question of the identity conditions for a mind, or explanations of what individuates minds, will vary between Nouist views, enough in some instances so that a mind in one view is nothing like a mind in another. For the view we will consider in detail, different streams (or Theatres) of consciousness correspond to different minds. The fact that minds can be characterised in significantly different ways across Nouist positions is, I think, not a concern. Different Physicalist theories might make different claims about what powers and properties the fundamental physical stuff has, such that between some theories there will be nothing in common other than that both substances are considered 'physical'. What will be shared between all these Physicalist views is that there is some sense in which the stuff described is physical and not mental. It is no different here for the Nouist. What will be shared between all these Nouist views is that there is some sense in which the stuff described is mental and not physical. There should be something about Nouist variants that makes it not unreasonable for us to describe the fundamental stuff as minds, and such views will no doubt say something about the fundamental role of the phenomenal, about consciousness, about the experiential what-it's-likeness.

I have chosen to focus on this particular Nouism with its particular characterisation of minds and their powers not just because I think it provides a promising foundation, but also because it is of interest to me, accords well with some of the views many people hold, and for the sake of having a specific view to focus on. This thesis is in large part a descriptive project, to outline just such a view in detail. It provides a reasonably detailed first pass description of a 'Materialist Nouist' view (the 'Materialist' term here will be described on p. 9 and more in section 2.1). My primary purpose is not to persuade readers that the view described herein is correct, but rather that it is interesting enough to warrant consideration – to get a foot in the door. There is extra work to be done to convince someone that the view described herein should be accepted. And as may be guessed, the reasons that might be given to convince a Physicalist that they should consider this view seriously would be different to the reasons given to, say, a Substance Dualist. While I will on occasion give some reason for thinking this view fares well or poorly compared to some rival view (see Chapter 8), those considerations are for the most part secondary to the main purpose: to give a description of such a view, in the hopes that it can be seen as at least no worse than Physicalism, and is therefore at least as preferable as Physicalism. I do think that Nouism is a worthy rival to Physicalism, and so it is worth the effort to understand what the view is in order to determine if it should be preferred.

With that in mind, a little can be said about the motivation for such a

view over, say, Physicalism. If you think that God exists, or that the hard problem of consciousness is not able to be addressed by the Physicalist, then you have reason to prefer a view like the Materialist Nouism of this thesis. Some brief remarks about the reasons for preferring this view over each of Physicalism and a view like George Berkeley's can be found in sections 2.2, 2.3, and 8.3.1, once some groundwork has been laid. When it comes to comparing this view to Substance Dualism, Materialist Nouism is a simpler account, and I will make a brief case for that below in section 1.3. Overall, I am attracted to a view of this sort over Physicalism and Dualism because it strikes me as having great explanatory power and sufficient amounts of simplicity. It can contribute valuable thoughts on a variety of topics, including, say, causation, personal identity, meta-ethics, and more. Some of these topics will be touched on briefly in chapters 5 and 6, followed by a bird's eye view comparison to Physicalism given in Chapter 8.

The rest of this chapter will set the context for Materialist Nouism. In the following sections I will describe where such a view fits inside a taxonomy of related views, compare it to Substance Dualism to give a sense of what the view is, and then situate it in the context of Idealist views. That will lay the groundwork for describing the key concepts in chapters 3 and 4, concepts that will play an important role throughout the rest of this thesis.

This thesis starts by situating Nouism within a broader framework of views in this chapter, followed by a more detailed analysis of George Berkeley's view in Chapter 2. Chapters 3 and 4 introduce the key concepts for Nouism, and Materialist Nouism specifically, by first looking at phenomenology in Chapter 3, followed by how the Nouist accounts for matter in Chapter 4. With these foundations in place, this leaves us in a position to examine some interesting questions around the universe and the practice of science in Chapter 5, followed by a brief account of the self in Chapter 6. These chapters will now have concluded our presentation of Materialist Nouism along with some of the issues connected with it. The final two chapters are dedicated to comparing Materialist Nouism, first to other Nouist views in Chapter 7, and then to Physicalism in Chapter 8, as a way of summarising where we have found ourselves at the end. There are many interesting questions left untouched, but our journey ends there for now. A Nouist view is far reaching in its metaphysical implications, lying close to the foundations of a great deal of philosophy, and space does not permit us to look at many other interesting questions.

1.2 A Taxonomy

The view of this thesis is different enough to common views such that it will be useful to compare them briefly. We will take a survey of some of the different sorts of views that might be developed, for the purposes of making

clear where the Nouism of this thesis stands.

First, let's consider the most commonly postulated candidates for fundamental things, leaving it as an open question whether 'substances' mean objects, properties, states, events, processes, etc. We might have, for example, fundamentally just physical substances or properties (call this view Physicalism), or fundamentally just mental substances or properties (when the substances are minds, call this view Nouism), or both mental and physical substances or properties (Substance or Property Dualism, respectively), or some sort of neutral substance that is in some sense simultaneously mental and physical or can bear both mental and physical properties (Neutral Monism). For Substance Dualist and Nouist views, the typical mental substances or entities include at least minds and their powers, and qualia (see Chapter 3). For the typical Physicalist view, there might be fundamental physical substances like particles and their powers, or fields and their powers, or different physical entities at different levels. Or, there might be a distribution of properties through space and time and that's all (Humean Supervenience).

We may say that there are minds, or minded things. Some views may say that there are minds, and others may say that there are no minds. For the Physicalist, the mental things can be taken as identical to physical things (for example, Identity Theory/Reductive Physicalism), or as things that in some sense arise wholly from, but do not reduce to, the physical (e.g., Non-Reductive Physicalism). Some Eliminativist Physicalist views may even deny the existence of the mental entirely, and instead claim there are merely behaviours and dispositions and so forth, and consider any talk about mental things as simply mistaken or misguided. From the Substance Dualist perspective, we can have a claim that the mind is a thing that stands on its own (Substance Dualism), or at least that there are things that have mental properties, and those mental properties cannot be reduced to physical properties (Property Dualism). For the Nouist, we have variations that mirror the options listed for the Physicalist, but this time considering the place of the physical rather than the place of the mental. Regarding physical things, the Nouist may say that no physical things exist (Berkeley's view, see Chapter 2), or that physical things in some sense 'arise' wholly from or reduce to the mental, as on the Nouism of this thesis. We can consider variations here where the physical world reduces to states of minds other than my own (e.g., God's mind, as on the Nouism of this thesis), my own mind (e.g., Solipsism), or a combination of both. On the first of these views, the material world is taken as existing independently of our own minds (but not of all minds), a claim of the Nouism of this thesis as well as of the typical Physicalist view.

We may also examine the assumption that, as Campbell (1984, pp. 6-7) put it, "each normal adult has a mind, has the whole of a mind, has only one mind, and has a mind nobody else has". Considering specifically Nouist

views, we might alternatively have views where there is just one mind experiencing the world from different perspectives (Singularist Nouism), or that there is only one human body that has a mind associated with it (Solipsism), or that there are sometimes more than one mind associated with a given body, or even that some bodies have no associated mind.

We can also examine interaction between matter and mind. First, we might have no interaction between matter and mind (e.g., occasionalism), where the two are kept in step (or not) at all moments. Second, we might have two way interaction between matter and mind, such as on Substance Dualism, or Identity Theory (where the latter treats the mental as identical to some physical state or process or event), or the particular Pluralist Materialist Nouism of this thesis. Third, we can have one way interaction from body to mind. For the Physicalist, this might give us an epiphenomenal view where the mind has no power to influence the physical. For the Pluralist Materialist Nouist, this gives us an equivalent 'epiphenomenal' view where the world in God's mind is importantly connected to how the world appears to us, but we have no power to effect any change to that physical world which exists as an idea of sorts in God's mind, neither directly nor by influencing God to do so voluntarily. Fourth and finally, we can have one way interaction from mind to body. This would be a strange view, for it would involve the existence of a physical world about which we can have no knowledge, but that minds have an influence over. Any means we might have of learning about this world would entail a way to have interaction from body to mind, which contradicts the claim that no such thing is possible.

We can also ask about what the mind is, and consider variations therein. For the Cartesian Dualist (a type of Substance Dualist that we will assume as a paradigmatic example of Dualism), the mind is a thing which thinks, has memories, desires, feelings, a will, and so forth. A Cartesian mind has experiences, such as the experience as of seeing a dog. While seeing a dog might contain some mental aspects to it – the phenomenology of what it's like to see a dog – the dog itself is taken to be physical. We might also consider an alternative characterisation of the mind to the Cartesian mind, where we take some things from the Cartesian mind and place them into the physical world, 'out there' where the dog is. The 'act' or 'experience' of remembering, for example, might be placed in the physical world – specifically, in our brain. Just like there's something that it's like to see a dog (the phenomenology), there is something that it's like to remember. The memory itself, the process of remembering, is something in the world – specifically, in the brain. We need not suppose as much as the Cartesian Dualist supposes as being in our own mind, and can place more of it in the brain (where the brain is part of the physical world, which is something in God's mind – more will be said in section 4.1 and later on how the Nouist can talk about brains and other physical objects despite claiming there is fundamentally just mental stuff). We will look into this in more detail in Chapter 3 when

we look at phenomenology and cognitive phenomenology.

In summary, the Nouism of this thesis has only minds and their powers and contents at the fundamental level, with the physical world reducing to (say) states of minds. Specifically, the physical world reduces to contents in God's mind, and the physical world therefore has an existence independent of our minds, but not independent of any mind. The Nouism of this thesis can have each human body having a mind, the whole of a mind, only one mind, and a mind nobody else has (phrasing borrowed from Campbell (1984)), and not just humans, but many animals as well, but this is a contingent claim that is not true of all Nouist views. It is a Nouism that places more on the physical side than does the Cartesian Dualist, with significant portions of things like memory, desires, feelings, and so forth finding their explanation in the physical world (as 'physical world' is understood on a Nouist view like this) rather than in the mind that is having the experience of remembering, desiring, feeling, and so forth.

1.3 Comparison to Dualism

In the preceding section, I situated Materialist Nouism among popular alternative theories (a description of the 'Materialist' part is still to come on p. 9 and more in section 2.1). To help understand just what kind of a view Materialist Nouism is, this section will compare it in greater detail to Substance Dualism, and in particular a Cartesian style Dualism influenced by typical Christian beliefs. It is my hope that the reader will be sufficiently familiar with what such a Substance Dualist view claims about the world, so that we can move from the familiar (Christian influenced Cartesian Dualism) to the unfamiliar (Nouism, and in particular, Materialist Nouism). There is no need for the reader to find this particular Christian influenced Substance Dualism plausible or correct, but rather merely comprehensible. It is simply a launching point to help understand the unfamiliar (a Materialist Nouism) by means of comparison to the familiar (Cartesian Dualist views).

Take such a common Cartesian Dualist view. There are minds or spirits or souls (we will in this context use these terms interchangeably), and there are physical things, and these each are fundamental types of substances. The physical world does not depend on the mental, and the mental world does not depend on the physical. Nonetheless, despite this independence, the two are related or connected closely. There is, for example, associated with each living human around one (and probably only one) mind. When the (human) body undergoes particular changes, the mind associated with that body has particular experiences. For example, we might think about sunlight hitting the surface of a red ball, which results in some light (mostly in the red wavelength) reflecting from that surface in a direction that leads to it impacting upon the retina of that human body. This then leads down

the causal chain to some neurons firing, and a (perhaps particular) part of the brain being in a particular state leads, through a mental to physical causal process, to an experience being had by a mind – an experience as of seeing a red ball.

This is one of two primary ways upon this sort of Cartesian Dualism for a mind to have experiences as of seeing things – for example, as of seeing a red ball. The first way, as described above, involves a mind-independent brain which, being in particular states, leads to experiences being had via a physical to mental causal process. On some Cartesian Dualist views, this is just one of two ways that a mind may have an experience like being in a physical world. A second way, some Christians would suppose, is that God could give such minds direct experiences, sidestepping the brain entirely. For example, consider this vision of John's (Rev. 1:10-13 New International Version):

On the Lord's Day I was in the Spirit, and I heard behind me a loud voice like a trumpet [...] I turned around to see the voice that was speaking to me. And when I turned I saw seven golden lampstands, and among the lampstands was someone like a son of man, dressed in a robe reaching down to his feet and with a golden sash around his chest.

Note first that John is 'in the Spirit'. One interpretation is to suppose that John's body is in one place, but his spirit or mind is elsewhere (or nowhere). I am not here endorsing this interpretation, but rather using it as an example of the kind of interpretation that should be familiar to us – a Cartesian mind with a separation between body and mind. We might imagine John's body at home, lying on a bed, for example, while his mind (spirit) is experiencing this vision.

Let us examine the character of the vision. Note that the story of this vision involves John able to hear things – John heard a loud voice before him. Note also that John turned. This vision is not just a story about sounds and lampstands and someone like a son of man – it is a story also about the kind of body that John has. It is a story about John, having a body that can hear sounds and needs to turn to see the source of the sound. We might imagine that John's vision-body is one very much like a human body, capable of seeing colours and shapes of typical sorts, able to hear sounds much like humans can, and needing to turn to see the sources of sounds that are behind him. This vision is of a fuller world, one not just with objects around John, but also of the kind of body John has.

This gives us a second way for a mind to have experiences as of seeing things, and indeed as of having a wide variety of experiences. The first way involves a brain being in a particular state, which causes changes in the mind and produces the experience. This second way involves no brains, but rather has God directly give experiences to the mind, regardless of what kind of physical body the mind is associated with. Of course, some such Dualists might claim that the vision scenario still involves brain changes – God produces the vision by making changes in the brain, and so there is only one mechanism rather than two. However, it is not difficult to suppose that some Substance Dualists think that such visions, independent of any physical body, are possible. And indeed, the Dualists that we have in mind are ones who think that when the body dies, our minds continue to have experiences. And so there must be at least one other way to continue having experiences independent of the body. Remembering that our purpose here is to move from the familiar to the unfamiliar, it is hopefully clear to the reader that such a Substance Dualist view as I outline above is held by some, and more importantly, that you, the reader, understand the view that I refer to here.

Return to the vision that John had. It seems, from the details of the vision, that it can replicate a sense of being in a location, hearing sounds, seeing things, having a body, and so on. And so we might wonder, if there are these two distinct ways of producing such experiences – one in which there is a physical body and brain that has particular states and state changes, and another in which there is only imagined (by God) to be a physical body and brain that has particular states and state changes and God gives these experiences directly as appropriate for the states of the imagined body (e.g., John 'turns' and sees something different) – do we really need both? How could we even distinguish between the two? It seems an unnecessary inflation of our theory to have both methods. Why not suppose that there is just God giving us visions as of being in a world of the sort we take ourselves to be in, rather than supposing that there is some mind-independent physical world corresponding to that experience? This is to embrace the very scenario that worried Descartes (1641/1996, p. 14):

And yet firmly rooted in my mind is the long-standing opinion that there is an omnipotent God who made me the kind of creature that I am. How do I know that he has not brought it about that there is no earth, no sky, no extended thing, no shape, no size, no place, while at the same time ensuring that all these things appear to me to exist just as they do now?

This is the view of the Nouist. It is a Substance Dualist of the sort outlined above, but with only visions, and without the mind-independent physical world. There is God and the satellite minds, and God giving experiences to those minds, visions, of being in a world like the one we take ourselves to be in. A 'Subtance Dualism' taking out the physical, leaving only the mental.

The *Materialist* Nouist, when speaking casually, does not say that there is no earth, no heaven, no extended body, no magnitude, and no place, but

rather that these do indeed exist and we were mistaken to think that they exist independent of any mind. They exist as 'ideas' in God's mind, that God then gives us visions as of seeing, hearing, touching, and so on. The Nouism of this thesis parts ways with George Berkeley when it comes to claims of this sort. While these ideas will be covered when the Nouism of this thesis is contrasted with that of Berkeley in Chapter 2, and in greater detail in Chapter 4, here I will briefly introduce the term 'Materialist'. I use this term in a very restricted sense, similar to the way in which Berkeley used the term 'Matter'. It is used to denote the idea that there is something behind the appearances, behind the way things appear to us. I may look at an apple, turn the apple a little, and see it differently, yet I suppose that despite these different appearances, there is the same underlying object. This idea, that there can be underlying objects, is the Materialist part of Nouism, and is a Nouism of the sort sketched out by Robert Adams (2007, pp. 47-52). It is to be contrasted to Berkeley's claim that there is nothing but the appearances. We will turn to Berkeley's view shortly, but first let us see where we might place Nouism relative to Idealist views.

1.4 'Nouism' and not 'Idealism'

Just as Physicalism admits of only physical substances and/or properties at the fundamental level, Nouism admits of only mental substances and/or properties at the fundamental level. There are minds, their relations, their powers, and their contents. Views that share some significant features in common with the particular Nouism of this thesis have been presented by others, most notably by George Berkeley (1710/1713/1988), and have come to be called names like 'Ontological Idealism', or 'Absolute Idealism' (Guyer and Horstmann 2015). While not a new idea, Nouism lacks its fair share of modern defenders. Philosophy has moved since the time of Berkeley, and the presentation of such a view can benefit from modern philosophical insights and scientific advancements. Therefore, this thesis has two aims. First, to present a modern account of a view like this. Second, to argue that such a view is at the least no less reasonable than a Physicalist position. While I am inclined to embrace the view presented herein, I won't be trying to persuade the reader to accept it. I only hope to convince the reader that such a view is not unreasonable when compared with a Physicalist account.

One way we have seen of fleshing out a Nouist view is by having a central mind – God – that plays an important part in the experiences had by satellite minds. It is this central mind that gives this view its regularity and consistency between the experiences of separate minds, that allows it to be that *different* minds are having experiences of the *same* physical world – the physical world in God's mind. Another way to flesh out such a view is to say that there is just one mind, but that mind has experiences from

many different perspectives. These views would both count as Nouist. In this thesis, I am interested in saying things about Nouist views in general, as well as things about specific forms of Nouism. I will try to be clear when I think that I am remarking on something that is true of only some such views, rather than true of them all.

1.4.1 Naming Nouism

Nouist views would typically be called 'Idealist' by philosophers in the anglophone philosophical world. There are, however, many different views that are called 'Idealist', and 'Idealist' is not a term that Berkeley claimed for himself. Instead, Berkeley himself called his view 'Immaterialism' (Berkeley 1710/1713/1988, p. 202). Paul Redding (2009, p. 19) points out that the name 'Idealist' better belongs to a distinct view which we may sometimes call 'Continental Idealism'. He opts to refer to 'Continental Idealism' as just 'Idealism', and reserve for Berkeley's view the label 'Spiritual Realist'. In fact, there is a sense in which Berkeley's view is Idealist and the Nouism of this thesis is not, but we will discuss that in section 2.1.

To distinguish between these different views that are both labelled 'Idealist', some distinguish between epistemic and ontological position. Guyer and Horstmann (2015) describe the two positions as follows:

- 1. Something mental (the mind, spirit, reason, will) is the ultimate foundation of all reality, or even exhaustive of reality.
- 2. Although the existence of something independent of the mind is conceded, everything that we can know about this mind-independent "reality" is held to be so permeated by the creative, formative, or constructive activities of the mind (of some kind or other) that all claims to knowledge must be considered, in some sense, to be a form of self-knowledge.

Views of the first sort may be called 'Ontological Idealism', and would include Nouist views like those of Berkeley and that presented in this thesis. Views of the second sort may be called 'Epistemological Idealism'.

Unfortunately, there are some concerns with following the above characterisation. Consider what the writers may mean by 'something independent of the mind'. Here, they may mean 'something independent of my mind', or alternatively, 'something independent of any mind'. I think that there is no compelling reason to think that it refers to the second. The main claim of this second position is that our knowledge of that external reality (whether it is in another mind, or independent of all minds) is far too intertwined with our own mind for us to have knowledge about it alone. This can be a concern whether one thought that the external reality was independent of all minds, or just independent of my mind.

This leads to an important question about whether or not Ontological Idealism so defined can be considered appropriately related to that which is here called Epistemological Idealism. We might think that some view B can be considered an ontological version of view A, when A makes the claim that 'It is useful to describe the world as being x', and B makes the view that 'The world is in fact x'. For example, in science, one may hold a view that concepts like electrons are convenient fictions. The world appears to contain, or it is useful to act as though it contains, electrons, though we make no claim about whether these are actually real. The realist, then, claims that the world is in fact the way that we act as though it is. There is a clear link here between the epistemic claim and the ontological one.

The two views under consideration do not share a link of this sort. It is not that Epistemic Idealism makes a claim about a convenient way of describing the world, and Ontological Idealism says this description accurately tells us is the way the world really is. So-called Epistemic and Ontological Idealism are in fact distinct views that lack the appropriate connection for one to be considered merely an epistemic version of the other, and one may hold to both, neither, or one of them individually. The concerns that the so-called Epistemic Idealist raises are real ones that need to be considered. Ultimately, I think that we need not believe that we cannot have knowledge about just the external reality, although it may be difficult to obtain such knowledge. C'est la vie. But there is nothing about so-called Ontological Idealism that ties it to the Epistemic Idealist position.

Ultimately, I think we need a term other than 'Ontological Idealist', so that the name 'Idealist' can be reserved for views that are centrally about ideas. The very name 'Idealist' places emphasis on 'idea' which is not, for the view in this thesis, the central subject matter. Continental and Epistemological Idealists, on the other hand, are centrally concerned with ideas. For the view presented in this thesis, the central or foundational subject matter is mind. Ideas attach to minds, depending on minds for their existence, and so minds come first. The view in this thesis makes a claim about what fundamental substances there are, and there are fundamentally just minds. Just like the names 'Physicalist' and 'Materialist' highlight in their name the central substance on those views, so too should the name for the view in this thesis reflect the central place of minds.

So what name shall we choose? Spiritual Realist will not do. Spiritual Realism may be confused with Substance Dualism, since both the view defended here, and Substance Dualism, assert the existence of 'spirits', when 'spirits' are understood as 'minds'. Both are realist positions about spirits. Alternatively, if 'spirits' are taken in the sense of ghosts and such, then the term is not at all appropriate – the existence or not of spirits in this sense is a contingent question completely unrelated to whether one holds a view like Berkeley's, a Substance Dualist view, Physicalist view, or other. There's no incompatibility, after all, between Physicalism and the existence of ghosts

(see section 5.6).

Another option is 'Mentalist', as Howard Robinson (1982, p. 5) has at times preferred. However, if our goal is to find a term that will cause less confusion, this is not a good candidate. 'Mentalism' is a label that refers sometimes to a certain performing art which has nothing to do with that which we are considering here.

'Immaterialism', defined as a negation of Materialism, is also not appropriate. The view in this thesis is not a denial of material things, nor to be understood as simply a denial of materialism. As the term 'Materialism' was understood by Berkeley, the particular view presented in this thesis would be considered Materialist (see Chapter 2). This view is better thought of as a mirror to a Physicalist view. Rather than claiming that fundamentally there is just physical stuff, and from that we get everything, the view is that fundamentally there is just mental stuff, and from that we get everything. Neither Physicalism, nor the view in this thesis, requires a denial of the existence of material things or minds.

Calling views like Berkeley's 'Idealist' is not without grounds, and Berkeley's view deserves the label more than the view in this thesis does. Christian Wolff in 1721 gave a classification scheme which divided philosophers into Sceptics and Dogmatists, with the Dogmatists divided into Dualists and Monists, with the Monists divided into Materialists and Idealists, and finally the Idealists divided into Pluralists and Egoists. In 1734 he directly characterised Berkeley as an Idealist (Bracken 1965, p. 19). The reason for thinking that Berkeley was Idealist rather than Materialist are reasons for thinking that the particular view of this thesis is Materialist and not Idealist. Berkeley made the claim that objects themselves are identical to our ideas. I deny this claim, as did the Materialist. More will be said on this shortly, outlining in what sense Berkeley's view can be considered Idealist. The short of it is this: Berkeley's view is Idealist because of the identity claim he makes between ideas and objects, and *not* because of his claim that there are fundamentally just minds.

I propose therefore to use the name Materialist *Nouism* for the view of this thesis. This word has no tradition around it. The root word 'nou' here, taken from the Greek word $\nu o\hat{v}\sigma$, is to be understood as 'mind', recognising the fundamental and unique role minds play. The Physicalist has physical things at the foundation of the world, while the Nouist has $\nu o\hat{v}\sigma$ at the foundation of the world. I will not try to bend the term 'Idealist' to my own view while rejecting all imposters as illegitimate claimants, but rather let philosophers continue to use it as they please for other views. Nouism, not being defined as a negation of some Physicalist view, highlights the mirror between Physicalism and Nouism. Physicalism does not deny the existence of the mental, and Nouism does not deny the existence of the physical. Rather, they disagree about what it is that lies at the heart of each, and which of each are the fundamental. It is Nouism that will be the subject of

this thesis, and more specifically, a Materialist kind of Nouism, in the sense that Berkeley used the term 'Materialist'. Materialism will refer to the claim that there are physical objects that are at least in part independent of me, and related to but not the same as the way they appear to me. That is, specifically, the kind of Materialism that Berkeley rejected. Physicalism will refer to the view described above, which is the mirror of Nouism and places physical things at the fundamental level.

1.4.2 Nouism Then and Now

Nouist views, of which Berkeley's is one, have not been popular. Berkeley had many critics, including this less than flattering comment by Jean Pierre de Crousaz, in *Examen du Pyrrhonisme* (Bracken 1965, p. 2):

A modern author [presumably Berkeley] pretends to overthrow Pyrrhonism by denying the Existence of bodies and admitting only that of spirits. If he intends to impose that way on the rest of men, and if he hopes to succeed in it, he has a very wrong opinion; and if he thinks as he speaks, he does not give a lofty notion of his good sense, and it is necessary that he suppose the brains of other men to be as upside down as his certainly is...

Jean Pierre de Crousaz was not alone. Sir John Percival wrote in a letter to Berkeley about the reception of Berkeley's view in London, where it appears it was ridiculed rather than argued against (Rand 1914, p. 80):

'Tis incredible what prejudices can work on the best geniuses, nay and even on the lovers of novelty, for I did but name the subject matter of your book to some ingenious friends of mine and they immediately treated it with ridicule, at the same time refusing to read it, which I have not yet got one to do, and indeed I have not yet been able to discourse myself on it because I had it so lately, neither when I set about it may I be able to understand it thoroughly for want of having studied philosophy more. A physician of my acquaintance undertook to describe your person, and argued you must needs be mad, and that you ought to take remedies. A Bishop pitied you that a desire and vanity of starting something new should put you on such an undertaking, and when I justified you in that part of your character, and added the other deserving qualities you have, he said he could not tell what to think of you. Another told me an ingenious man ought not to be discouraged from exercising his wit, and said Erasmus was not the worse thought of for writing in praise of folly, but that you are not gone so far as a gentleman in town who asserts not only

that there is no such thing as matter but that we have no being at all.

As a summary of Berkeley's early reception, Bracken (1965, p. 6) writes:

As I think most of the material drawn from the "doldrum decades" indicates, Berkeley was maligned and his views distorted not in philosophical refutation, but in exceptionally partisan intellectual warfare. Aligned with no side, he was attacked by all sides.

Among modern philosophers, a view like this remains unpopular. A recent survey by Chalmers and Bourget (2014, p. 12) of the 99 top ranked universities regarding what philosopher believe showed that in a choice about the 'external world', between non-sceptical realism, scepticism, idealism, and other, 4.3% chose idealism. And we may suppose that it is only a proper subset of that 4.3% that had in mind a Nouist view in particular, and a further proper subset of that which hold to a *Materialist* Nouist view.

Among modern authors, we can find at least one sketch of a Materialist style Nouism with Robert Adams (2007). Alternatively, Robert Smithson (2017) offers an account of objects in terms of judgements of observers, where "truths about ordinary objects correspond to subjects' (fully informed, idealized) judgments about objects". This view seems like a Berkeley style Nouism, with Smithson providing a detailed account Berkeley's claim that experiences are grouped together by us and not by God. For defences of Berkeley style Nouism, we can look to philosophers such as Howard Robinson (2009) and John Foster (2008). Modern defenders of Nouism have often taken a negative approach towards defending their Nouist view. Howard Robinson (2009, p. 190) outlines the approach:

Arguments for idealism tend to focus on one of these features of the mind and argue that our conception of the physical cannot be disentangled from the mental feature in question, in the way that would be required if physical realism were correct and the physical world were a genuinely mind-independent reality. My procedure in this chapter, therefore, will be to consider, first, the argument that the physical world cannot be made independent of our sensory consciousness, and, second, that it cannot be set beyond our modes of thinking about it.

The problem with this approach is that it doesn't show that the Berkeleyan Nouist view is to be preferred, but just that there are (allegedly) problems with the Physicalist view. The Physicalist and Dualist rivals to Nouism have, I suspect, had many more modern philosopher-hours of thought applied to them. When great attention is applied to a hypothesis, its flaws become more readily apparent. When we embark upon a project, it might

at first seem to us rather simple. But as we pursue it, and dwell upon the details, we realise matters were not so simple as we first supposed. Considering this negative approach to defending Nouism, how do we know that Nouism won't suffer from problems just as serious, if not worse, than those laid against its alternatives?

When it comes to substantive hypotheses about how we view the world, our beliefs about a particular matter are typically tied up in a complex web with many other beliefs. Showing that there's some inconsistency in the web – that one of the nodes must be rejected – doesn't tell us how to disentangle the web. And that disentanglement, and replacement with a different web of beliefs, is the hard work. Showing some tension or flaw in, say, Physicalism, is the easy work. What replaces it?

It is therefore my intention to take a positive approach to presenting a Nouist view. I wish to spend as much time as possible detailing a Materialist Nouist view. Changing a substantial belief about the ontology of the world is going to require changing many parts of our web of beliefs, and so in this thesis we will peek at the structure of some parts of the web. Some time will be spent considering the problems with rival views, for sometimes the advantages of one view can be brought most sharply into view when contrasted with other views. For the most part, though, this will be a positive account. Not only will it show some of the world through the eyes of a Nouist, but it will show some of the ways in which other philosophical questions may be addressed. A great amount of modern philosophy has been dedicated to showing how various philosophical questions can be answered within the worldview of Physicalism (Stoljar 2010, pp. 18-21) – we might say, a project of 'physicalising philosophy'. This thesis is the beginning of a project to 'mentalise philosophy': showing how to answer questions when taking minds to be fundamental. To that end, I will be attempting to show how Nouism might answer particular philosophical questions, as well as trying to highlight areas where it seems to me that Nouism has the greatest weaknesses. These will be areas that are ripe for further philosophical researching when attending to the task of situating questions within a Nouist framework.

Chapter 2

Berkeley and Materialism

It would be inappropriate to write a thesis about Nouism without discussing Berkeley's view, which is perhaps the most well known of all Nouist views. For all the similarities that the Nouist position in this thesis has with Berkeley's view, there are important differences. Berkeley was, like many of his time, concerned with countering sceptical arguments. As Berkeley writes (§86):

And first as to ideas or unthinking things, our knowledge of these has been very much obscured and confounded, and we have been led into very dangerous errors, by supposing a twofold existence of the objects of sense, the one *intelligible*, or in the mind, the other *real* and without the mind: whereby unthinking things are thought to have a natural subsistence of their own, distinct from being perceived by spirits. This which, if I mistake not, has been shown to be a most groundless and absurd notion, is the very root of *scepticism*; for so long as men thought that real things subsisted without the mind, and that their knowledge was only so far forth *real* as it was conformable to *real things*, it follows, they could not be certain that they had any real knowledge at all. For how can it be known that the things which are perceived, are conformable to those which are not perceived, or exist without the mind?

Here Berkeley highlights the tendency to distinguish between the objects as they are in themselves, and our experiences of them. By distinguishing between these two things, we invite scepticism – the phenomena of experiences are not the same as the objects, and the phenomenal contents of experiences are all we have, so we cannot know that these phenomena conform to the way things are. Berkeley's solution is to remove this distinction. Instead, we should take our ideas (that which Berkeley calls 'ideas' I take to match closely with what I call the phenomena) as the things themselves,

rather than being representations of something else. Sensations (phenomena) and the things themselves are one and the same – $esse\ est\ percipi$. We can see this expressed clearly in the Dialogues (Berkeley 1710/1713/1988, pp. 191-2):

Hylas. You say you believe your sense; and seem to applaud yourself that in this you agree with the vulgar. According to you therefore, the true nature of a thing is discovered by the senses. If so, whence comes that disagreement? Why is not the same figure, and other sensible qualities, perceived all manner of ways? And why should we use a microscope, the better to discover the true nature of a body, if it were discoverable to the naked eye?

Philonous. Strictly speaking, Hylas, we do not see the same object that we feel; neither is the same object perceived by the microscope, which was by the naked eye. But in case every variation was thought sufficient to constitute a new kind or individual, the endless number or confusion of names would render language impracticable. Therefore to avoid this as well as other inconveniencies which are obvious upon a little thought, men combine together several ideas, apprehended by divers senses, or by the same sense at different times, or in different circumstances, but observed however to have some connection in nature, either with respect to coexistence or succession; all which they refer to one name, and consider as one thing. Hence it follows that when I examine by my other senses a thing I have seen, it is not in order to understand better the same object which I had perceived by sight, the object of one sense not being perceived by the other senses. And when I look through a microscope, it is not that I may perceive more clearly what I perceived already with my bare eyes, the object perceived by the glass being quite different from the former. But in both cases my aim is only to know what ideas are connected together; and the more a man knows of the connection of ideas, the more he is said to know of the nature of things.

Here we have a clear statement that it is the ideas (phenomena) that are real, and the things we call 'things' are merely statements about connections between ideas. Perhaps that such and such an idea tends to be followed by another particular idea, and I come to call these 'things'. I see that which I call a mug, and I twist it so the handle appears a little more to the left, and I call that the same mug also. These are different sensations, but I tie them together under the name 'mug'. This works well, we might suppose, when

there are regularities we can observe. What if, instead, it were the case that there was no regularity that we could remember?

What therefore if our ideas are variable; what if our senses are not in all circumstances affected with the same appearances? It will not thence follow they are not to be trusted, or that they are inconsistent either with themselves or anything else, except it be with your preconceived notion of (I know not what) one single, unchanged, unperceivable, real nature, marked by each name: which prejudice seems to have taken its rise from not rightly understanding the common language of men speaking of several distinct ideas, as united into one thing by the mind. (Berkeley 1710/1713/1988, p. 192)

The real things are the ideas, and the names we give to connections between ideas is our own doing, and not something that refers to a real underlying object out there. The 'mug' was my own term that I used to tie together distinct sensations, and not something that denotes any real connection in the world that ties these sensations together.

If we accept Berkeley's idea, it leaves no room for scepticism, because our sensations are the things themselves – what can be known is what is known. Berkeley is not saying that there are sensations and things, and the things are not real and all that exists are the sensations. Rather, that the things and the sensations are one and the same. It would be wrong, on Berkeley's view, to say that all things are an illusion, because an illusion is understood as (for example) an image of a thing that gives the appearance that it is really there when it is not. On Berkeley's view, that just is the real thing.

And it is on this point that the Nouism of this thesis diverges significantly and importantly from Berkeley. It is a Nouism which keeps the distinction between sensations and things, and in the process loses its ability to use Berkeley's solution to the sceptical challenge. It does not say that esse est percipi. Rather, it states that there are different kinds of contents to minds, of which sensations are one, and the sensations we have are what they are become of a non-sensory blueprint that God has in mind of the physical universe. There is a blueprint that underlies our experiences, a blueprint in God's mind of a universe with objects, which is distinct from the experiences themselves. We have an experience as of seeing a mug because the blueprint God has in mind is of a world with a mug of a particular sort in a particular physical relation to a human body, and so forth, which leads to my having the experience I have. There is a distinction between the blueprint itself and the experiences I have as a result of the blueprint being the way it is.

This is a Nouism that agrees with the Physicalist that says there are things which exist outside my mind which are distinct from my sensations

but which my sensations are nevertheless explained by, but also agrees with Berkeley that there are no things we call 'physical' that have any existence or explanation outside of any minds. It is not, on this view, that 'real things subsisted without the mind' (§86), but rather that some of them may subsist without my mind. The sensations that I have which are not of things in my mind are rather of things in other minds – or, to be more precise, experiences that are explained by the blueprint of the universe that God has in mind.

2.1 Situating Berkeley's Idealism

Let us return to the taxonomy given by Wolff (p. 13). We had the Dogmatists divided into Dualists and Monists, and the Monists divided into Materialists and Idealists, and the Idealists into Pluralists and Egoists. Unfortunately, when we try to represent the diversity of opinions held by philosophers, things become messy. I have above distinguished between Physicalists and Nouists, with the view of this thesis and that of Berkeley falling into the Nouist category, and many modern atheists falling into the Physcalist category.

Some modern day writers use the terms material and physical interchangeably, so that Physicalist and Materialist are just different names for the same things. This may not, however, be the case. As I have outlined above, the place where the Nouism of this thesis diverges from Berkeley is when he claims that the things themselves and our sensations are one and the same. The Nouism of this thesis falls more clearly into what Berkeley calls a Materialist position, where it is asserted that there exist objects external to my mind, distinct from my experiences of them, yet nevertheless importantly connected to my experiences. In this sense, this view may be considered Materialist.

In a similar way, Berkeley claiming that sensations and things are one and the same may be said to be a realist about ideas. Our ideas just are the things. In this sense, Berkeley may in fact be justifiably called an Idealist, when contrasting him from the position of the Materialist. The Idealist in this sense is the one who takes our ideas to be the things themselves. So what I present in this thesis is a Materialist Nouist view, while Berkeley has an Idealist Nouist view.

This usage may seem a little strange, because of our modern habit of using terms like 'Physicalist' and 'Materialist' to refer to the same thing. For the purposes of this thesis, I intend to split these two terms apart. 'Physicalist' will refer to the view that is a mirror of Nouism, that places physical things at the fundamental level. 'Materialist' will refer to one that thinks that there are objects out there distinct from my experiences but somehow explanations of the experiences I have, either in part or in whole. That is, the kind of Materialism that Berkeley rejected. Berkeley's Nouism is

an Idealist Nouism, while the Nouism of this thesis is a Materialist Nouism.

Berkeley solves sceptical worries by identifying the phenomena of our experiences (ideas) with the objects. These are one and the same. As Philonous says, it is not the same object seen under the microscope as is seen with the naked eye. It is interesting to note that there is a Physicalist view that also identifies sensations with objects: Mind-Brain Identity theories. While these Physicalist Identity theorists do not suppose that all objects (or physical states of affairs) are identical to sensations, they do suppose that some are. The difference between Berkeley and such Identity Physicalists is that Berkeley takes there to be only minds, while Physicalists take there to be only physical things. Both do identify some sensations with objects. And so, in place of the 'Idealist', we can call Berkeley the Nouist equivalent of an Identity theorist: 'Identism', or 'Identity Theory'. By using this term in place of 'Idealist', I can be clearer about what I mean by each view, without carrying the baggage of multiple meanings that 'Idealism' has to different people. The Materialist is distinguished from the Identist:

- Materialism: There are no objects that are identical to my sensations/ideas
- **Identism:** There are some objects that are identical to my sensations/ideas

Where by 'objects' I have in mind the real things of the physical world. The Physicalist is distinguished from the Nouist:

- **Physicalist:** Fundamental stuff is just physical stuff (saying nothing about whether this 'stuff' is objects, properties, states, events, processes, etc)
- Nouist: Fundamental stuff is just mental stuff

Berkeley is an Identity Nouist, as are some modern Berkeley-style Nouist defenders such as John Foster (2008) and Howard Robinson (2009), while the view in this thesis and that of Robert Adams (2007) are Materialist Nouist ones. Running through the combinations, we have some examples of each:

- Materialist Physicalist: There is just physical stuff and some of this gives rise to experiences (and consciousness) but is not identical to them
- **Identity Physicalist:** There is just physical stuff, and some of this just is (identical to) experiences (and consciousness)

- Materialist Nouist: There is just mental stuff, and objects are not identical to experiences had by this stuff, but explain or are represented by these experiences (the view of this thesis)
- **Identity Nouist:** There is just mental stuff, and objects are identical to experiences had by this stuff (Berkeley's View)

Our taxonomical journey is almost complete, but we must first look at a final category. The Idealist, according to Wolff, was divided into the Pluralist and the Egoist. This would, in our new terminology, correspond to dividing the Identist into Pluralists and Egoists, where the former assert the existence of many minds, while the latter claim there is but one. But there is no reason why a Materialist could not also be either a Pluralist or an Egoist. The same goes for a Physicalist and a Nouist. What we find is that rather than having a clear branching tree, there are instead overlapping categories. One may choose between A and B, and then between C and D without concern for the preceding choice.

Taxonomies are a messy business. The terms as defined above are only intended to help the reader understand where certain points of agreement and disagreement are, and not to suggest a way in which we must divide these views up.

2.2 Why Nouism and not Physicalism

It is my view that there is in fact very little practical difference between Nouism and Physicalism when it comes to dealing with a great many different philosophical and scientific questions. That being said, I think there are at least two propositions such that, if anyone holds either of them to be true, they have a reason to prefer Nouism over Physicalism:

- 1. God exists
- 2. Physical stuff cannot account for consciousness and/or experiences

There are things unexplained on each of Nouism and Physicalism. Essentially, the Nouist 'solves' problems about consciousness and experience by making minds the fundamental substance, much like Einstein 'solved' problems with measurements of the speed of light by stipulating the equivalence of all inertial frames of reference rather than explaining it (Rindler 2003, pp. 1-2). Nouism simply assumes these things, rather than explain them in any way. The Physicalist does the same when it comes to physical things. Physical things are assumed to exist, rather than explained.

Each contender for a fundamental worldview asks listeners to grant them a toolbox. The speaker tells the listener what tools will be in the toolbox, and says that given just these tools, I can explain everything else. The Physicalist says, 'grant me just fundamentally physical stuff, and I can show you

how we can explain everything else'. The Nouist says, 'grant me just fundamentally mental stuff, and I can show you how we can explain everything else'. The Substance Dualist says, 'grant me both fundamentally physical and fundamentally mental stuff, and I can show you how we can explain everything else'.

This is the promise of each worldview. The problem is, if you accept (2), then you think that the tools the Physicalist has granted themselves are not up to the task. There's not enough in the toolbox to achieve that which was promised. In a similar way, if you accept (1), then you cannot be a Physicalist. God (in this sense) is a mental being that does not depend on the physical in any way, and so is incompatible with Physicalism.

Nouism is not asking for any greater amount of fundamental kinds of things than the Physicalist (see section 8.2.3), and unlike Physicalism is also compatible with (1) and (2). Of course, Nouism is not the only contender here. One may be, for example, a Substance Dualist or a Neutral Monist. It is not the role of this thesis to defend Nouism against all rivals. Instead, it is to show how Nouism is capable of being a rival. That is, when we place before us all the various candidate theories for explaining the fundamental nature of the world, Nouism deserves a place. It is at least not significantly worse than Physicalism, it requires less kinds of tools in the toolbox than Dualism, and may compare well to other candidates should we consider them. While Physicalism and Nouism are compared in Chapter 8, a comparison with a wider set of candidates is outside of the scope of this thesis.

2.3 Why Materialist Nouism and not Identity Nouism

Berkeley was concerned with addressing sceptical worries. In the dialogues, Berkeley has us consider what it is we might say is true of material objects - objects taken to be 'out there'. As we think about the various so-called secondary qualities, we note that it appears these things are all in our minds, and not in the objects. I may see an object as red, while some other creature may see it as white, or not at all coloured. What accounts for these differences is something in our own mind, not in the purported object. The same is true of sounds. Sounds are taken to be motions of the air which hit our ear drums, and then are heard as sounds. This, again, is not something in the object itself, but something in us. What about a so-called primary quality? Consider extension. What appears small to us may appear very large to a mite (Berkeley 1710/1713/1988, p. 138). What may appear to be moving fast to one, seems to be going slow to another. In such a manner, we strip away everything that we might suppose to attribute to the object itself, and find it actually belongs in our mind, until we are left with nothing we can say belongs to the material object itself. When all is said and done, what is it we can say or know about the object that is 'out there'? Nothing. This is the sceptical worry that Berkeley has in mind, and that he thinks he can solve.

Berkeley's resolution is to identify the objects with our ideas. They are one and the same. It is not that there is some 'book' that is responsible for our experience as of seeing a book, or as of hearing the ruffling of pages as we turn them. The seeing of the book and the ruffling of pages are the things. The 'tree' isn't some object which is causally responsible for our having impressed on our mind an image of green and brown, with leaves and a trunk. The image of green and brown, with leaves and a trunk, is all there is – no object underlying it, just the sensation, followed by another sensation, and another. The moment we distinguish between the thing itself and the phenomenal part of our experience of it, there scepticism finds a way in.

Now the astute reader will realise that this may lead to a problem. For when we have an experience as of the leaves of a tree blowing in the wind, this is a different experience than as of the leaves remaining motionless on a windless day. If we identify objects with the experiences, then different experiences must be different objects. And this is precisely what Berkeley tells us. Berkeley, speaking through Philonous, writes, "Strictly speaking, Hylas, we do not see the same object that we feel; neither is the same object perceived by the microscope, which was by the naked eye". Such a move when considered carefully, far from being the common-sense view (as Berkeley claimed in a few places, e.g., Berkeley (1710/1713/1988, p. 204)), seems quite ridiculous. The ways in which Berkeley's view bucks common sense did not escape the notice of his early critics, and one anonymous reviewer of Berkeley in the Journal Litéraire opening issue, May-June, 1713, writes (Bracken 1965, pp. 45-6):

Would [Berkeley] be well received by a peasant if he came to him maintaining that [the horse they see] exists only in the heads of those who look at it?

Although Berkeley avails himself of vulgar language, the meanings behind the words as he uses them seems unlikely, as a matter of fact about people, to be the common-sense one. This is a small problem, because though Berkeley may be mistaken about what it is people mean when they talk, that does not mean Berkeley is mistaken in his claim that this is the way the world is. What we find, though, is that when we consider Berkeley's view in more detail, we come closer to crossing the line into the absurd. The same reviewer gave these examples to both demonstrate Berkeley's view, and show some of its stranger consequences (ibid., p. 46):

When I approach an object, with each step I take it is another object that I see. When I note an object through a microscope,

I do not see the same one that I perceive without this aid. The object I touch is not the same one I see. It is only in order to avoid confusion in language, that in these cases the same name is given to different objects, and that these are spoken of as if they were the same.

And just below that we see some of the stranger consequences,

The hand which strikes a blow cannot be seen. The stick I use in order to strike with, is not that which I hold in my hand. The man who insulted me is not the same one I call to Justice, and he who is seen hanged on the gallows is not the one who committed the theft¹.

These concerns are only the tip of the iceberg. For while Berkeley's claims so construed are strange, it is not obvious what is seriously wrong with them. After all, there are these distinct experiences. It might be strange to talk of these all as being the distinct objects and claiming that's all there is, but what is wrong with that? Here is what is wrong: it eliminates the possibility for there to be a common world shared by many minds. And insofar as someone doesn't want to commit themselves to the claim that there is just one mind, or many isolated minds, Berkeley's view is untenable. The seeds of this objection (which will be given in full in a moment) have not gone unnoticed by others. Anita Fritz (1954, pp. 561-2) begins to discuss some of the troubles with dealing with ideas in God's mind:

Berkeley often seems hesitant about committing himself concerning the nature of the archetype in God's mind. He wanted to maintain that the perceived world exists whether or not it is beheld by finite minds, and turned to God for a solution to the problem. However, since each finite spirit's perceived world differs at least slightly from that of every other finite spirit, there is a problem as to what world is continuously beheld by God. Berkeley rules out the possibility of God possessing the general ideas of the types represented in perception by his categorical attack on abstract ideas in the introduction of the *Principles*.

¹Immediately following these comments, the reviewer makes some other remarks which would apply to many Nouist, and not specifically Identity Nouism, but is not relevant to the point at hand:

I am not able to speak to anyone without an infinite spirit intervening in order to arouse in the spirit with whom I speak, the ideas that I wish to excite. By the same token, even for what I write here, God is obliged to make visible these characters to all those who cast their eyes upon this paper.

Let us interpret Berkeley in a strong sense: the ideas just are the things, and any attempt to attribute to the things some essence that is not a perception is to allow scepticism a road back in. That is, Berkeley's sceptical solution is to identify ideas with things so that there remains nothing unknown about those things since there is just the perception of them. Now, as pointed out above, it may be that no two spirits ever have exactly the same sensation. Suppose this is true. Now, suppose we want our theory of the world to have it as true that this physical world I experience is shared by other minds – even you, the reader of this thesis. In that case, for the world to be shared, there must be something in common between you and I in order that we can say it is shared. Without something in common, there is no thing that is shared, and therefore the world is not itself shared. If, as a matter of fact, no two spirits have the same ideas, then it cannot be the ideas themselves that are the shared world (moreover, for this to be a solution, it would mean that the only parts of the world we share are those parts where we have exactly the same sensations).

To give us a shared world, we cannot appeal to material objects which are distinct from but determining of our experiences, because this is what Berkeley explicitly rejects, and would reintroduce the sceptical worry. What if we instead place ideas in God's mind? We have two options here. Either we place the exact ideas themselves in God's mind, or we place general 'ideas' that are not themselves perceptions, but are a basis upon which God can choose which ideas to impress upon us.

The first of these two options – placing the direct ideas themselves in God's mind – does not solve the issue. There remains the question of why God ultimately impresses upon me this idea and not some other. If there is just the idea, and God's free choice without reason, then there is nothing shared or in common between my perceptions and those of others, other than dumb luck that we happen to on occasion have the same idea. What if God were in fact to have reason for the choice? That would entail that God has some notion that ties disparate ideas or phenomena together, a notion which is not itself a sensation/idea. This brings us to the second option.

The second of these two options – placing general 'ideas' in God's mind – is, I think, the right path, but amounts to eliminating Berkeley's ability to answer the sceptical worry. This solution involves God having in mind archetypes which are not the same as the ideas themselves, but rather are a foundation upon which God can determine which ideas to impress upon me and others who share this world with me. In this case, what is in common between us are the archetypes, or general ideas. There is no variation between me and other minds with respect to the archetypes, but instead only with respect to the ideas (experiences, phenomena) themselves which are based on the archetypes. But then, this solution is no different in kind to that which Berkeley called Materialist. We have here reintroduced a separation between the thing as it is in itself (the archetype) and my perception

of it. It does not matter that on this view the archetypes are in God's mind, rather than physical objects existing outside any mind. They play the same role of separating essence from perception, and therefore spell the end of Berkeley's program to solve sceptical concerns.

And this will be true generally for any solution that might attempt to introduce something in common between the ideas I have and the ideas that other minds have. Having minds that share a world, but have different ideas, requires something in common that does not vary between minds, even though the ideas vary. And having something in common just is to embrace a Materialist position and give up on Berkeley's solution. And for this reason, I think so long as we want a shared world that doesn't just involve you having the very same sensations as me, we cannot accept Berkeley's Identity Nouism. Moreover, this problem can be extended to even some forms of Berkeleyan Nouism that deny that there is a shared world. As long as the Nouist wants to say that there is some relation between the ideas, some reason why God has given a mind some idea A, followed by Brather than C, then the problem arises. There is something that explains why a mind has one idea and not another that is not itself an idea, that plays the same role as – is functionally indistinguishable from – material objects.

With all this said, Fritz (1954, p. 564) writes, "There is some evidence that Berkeley might also have been willing to accept general ideas, provided these were conceived to exist in God's mind, rather than in a Platonic realm of ideas." She quotes Berkeley from his letter to Dr. Johnson, March 1730 (ibid., p. 564):

I have no objection against calling the Ideas in the mind of God archetypes of ours. But I object against those archetypes by philosophers supposed to be real things, and to have an absolute rational existence distinct from their being perceived by any mind whatsoever.

In the Dialogues, we also find a hint that perhaps Berkeley would be open to a Materialist interpretation, though it can also be interpreted easily as an Identist position (Berkeley 1710/1713/1988, p. 182):

Hylas. ...Ask the fellow, whether that tree has an existence out of his mind: what answer think you he would make?

Philonous. The same that I should myself, that is, that it does not exist out of his mind. But then to a Christian it cannot surely be shocking to say, the real tree existing without his mind is truly known and comprehended by (that is, *exists in*) the infinite mind of God. Probably he may not at first glance be aware of the direct and immediate proof there is of this, inasmuch as the

very being of a tree, or any other sensible thing, implies a mind wherein it is. But the point itself he cannot deny. The question between the materialists and me is not, whether things have a real existence out of the mind of this or that person, but whether they have an absolute existence, distinct from being perceived by God, and exterior to all minds. This indeed some heathens and philosophers have affirmed, but whoever entertains notions of the Deity suitable to the Holy Scriptures, will be of another opinion.

Here Berkeley places an existence in the mind of God, and contrary to what I have said, places his point of disagreement with the Materialist to be regarding whether or not physical things have an absolute existence, outside all minds. But is this an existence of the ideas directly, or of some more general view? A short distance later, Berkeley denies that these are ideas that are perceived by God, when Hylas asks Philonous about pain (Berkeley 1710/1713/1988, p. 187):

Philonous. That God knows or understands all things, and that He knows among other things what pain is, even every sort of painful sensation, and what it is for His creatures to suffer pain, I make no question. But that God, though He knows and sometimes causes painful sensations in us, can Himself suffer pain, I positively deny.

Again, this can be interpreted as an Identist position, where the ideas dwell directly in the mind of God, but not perceived by God in the way that we perceive things. But it may also be a hint that perhaps Berkeley wants to distinguish between these ideas, and some other way in which they exist in God's mind, much like the Materialist view of this thesis. It could be that Berkeley's own view, if we were able to press him, is not so far removed from the Materialist Nouist one of this thesis. However, Berkeley as published does clearly identify ideas with the things, and so he serves as a good representative of such a position, even if he may not have maintained it under pressure. He placed great emphasis on the identity between ideas and objects. If it turns out that his claim is that for us ideas are the things, but the basis for those ideas is something more general in God's mind, then he is not the Identist Nouist and our disagreement is simply verbal. As will be seen in Chapter 4, general archetypes in God's mind, construed in this way, are functionally equivalent to material objects that the dialogues spend so much time arguing against. In this case, what I would call 'the things' are the archetypes in God's mind, while Berkeley reserves that label for the ideas. A verbal disagreement only.

In "Berkeley's Semiotic Idealism", Keota Fields (2018, p. 81) outlines

a case for Berkeley which has divine ideas play the role of guiding God's volitions regarding which sensations to cause within other minds:

That divine idea also guides the divine volition that causes those sensations, and observed regularities of coexistence and contiguity of sensations, that ground the first semiotic relation. ...

And shortly after:

external ideas (which accompany and guide the divine volitions that cause the observed regularities upon which internal signification is grounded)

What we have is a view where the divine ideas themselves, distinct from the sensations that minds have, in some way explain the regularities of the sensations of other minds, serving as God's guide for which sensations to impress upon other minds. These sensations operate together as a sign for the divine ideas (Fields 2018, p. 82-3): "When I see the sun, I have visual sensations that my imagination unites with other ideas to form a linguistic sign for a divine idea. That divine idea is the essence of the sun and gives my idea its meaning" (emphasis added). Throughout Fields' paper, we find the suggestion that the divine ideas are in some sense different from the sensations we receive, but are guiding of God's behaviour and our sensations point towards them. This may be a fair interpretation of Berkeley, or of at least what Berkeley would have agreed to if pressed, but it simply changes the point of disagreement. If we interpret Berkeley this way, then Philonous was wrong to treat so harshly the idea of the (as he calls them) Materialist, and Berkeley's solution to the sceptical worry no longer works. There are, after all, these divine ideas, or archetypes, or general ideas, or collections of ideas, and so on, in God's mind which are not the same as our perceptions, and, following the argumentative line of Philonous, there is (he might say) nothing we can know about them. Situated in God's mind, and lacking extension, sound, colour, and so on, since even collections of ideas lack these things (though the ideas in the collection may not), these divine ideas are just as unknowable as what Hylas called material things (if we accept Philonous' reasoning). I think therefore it is useful for the purposes of this thesis to interpret Berkeley as an Identist Nouist, but keeping in mind that Berkeley may have ended up a Materialist Nouist. And in being a Materialist Nouist, Berkeley would no longer be offering a solution to sceptical worries. The sceptical worry arises from asserting the existence of things distinct from our sensations (whether divine ideas of this sort, or physical things outside any minds), in particular things that explain our sensations but are inaccessible by them, and not from the mere assertion of the existence of objects outside all minds. That is, the sceptical worry is just as strong for the Materialist Nouist as for the Materialist Physicalist.

There are some defences of Berkeley against objections levelled at him, although the objections and responses I will briefly remark on here are not the same as the objection I have raised above. Kenneth Winkler (1989) points out that traditionally there have been two contradictory interpretations of Berkeley, apparently incompatible, and both justified by the text. One is what Winkler (ibid., p. 205) calls the 'perception interpretation', whereby unperceived objects continue to exist because God holds or 'observes' these ideas in some sense. The second interpretation, that Winkler (ibid., p. 206) calls the 'phenomenalist interpretation', is one whereby we do not talk about objects, but rather talk only about the ideas. This accords well with how I have interpreted Berkeley above. Winkler (ibid., p. 222) attempts to rescue both of these interpretations, by saying that God holds the ideas in his mind in some sense due to his intention to cause them – not the ideas themselves, but intentions to cause the ideas. Whether either interpretation is correct, or both can be united, this does not help rescue Berkeley from the objection above. The ideas themselves, once we seek to place relations between them in God's mind, we have a material world that is unknowable. Without it, we cannot have a shared world.

A criticism that is closer to the one I have raised above is considered by Winkler (ibid., p. 276-312). The objection, briefly stated, is that when Berkeley rejects our ability to know anything about matter, by parity we should not be able to know anything about spirit. This objection, like the one I raise above, claims that Berkeley will be subject to the same criticism he applies against Materialists. However, in this case the objection is subtly different – I do not say that there is a parity between our inability to know about spirit as much as matter, but rather that there must be matter (of a sort) on Berkeley's view for it to be in any way tenable. The problem isn't knowing spirits, but rather that there will be unknowable 'matter' on any kind of fix to Berkeley's view just as there is for the Materialist.

Melissa Frankel (2016, p. 44) looks to also consider a serious problem in this vein, quoting a passage from Berkeley that appears to justify thinking that Berkeley acknowledges the existence of indirect perception:

Near the end of his Three Dialogues Between Hylas and Philonous, Berkeley writes that he "acknowledge[s] a twofold state of things, the one ectypal or natural, the other archetypal and eternal[.] The former was created in time; the latter existed from everlasting in the mind of God."...it looks as though this would commit Berkeley to an indirect (representational) theory of perception, on which we human beings indirectly perceive divine archetypes by means of the ectypal ideas that we directly perceive.

This would indeed be a concern, and as Frankel outlines, contrary to what Berkeley writes. The solution offered by Frankel (ibid., pp. 55-9) is

to identify the 'archetypes' as divine powers in God to produce the ideas. The divine archetypes "are numerically identical with human ideas, and so the worry about indirect perception does not arise" (Frankel 2016, p. 58). This solution seems plausible to me, as far as it goes. However, it is not addressing the problem we are interested in: whether Berkeley had in mind divine powers when he said 'archetypes' or not, this does nothing to eliminate the fact that Berkeley needs something akin to matter to have a shared world between minds.

Overall, I consider the objection raised here a serious one, close enough to a proof. Without a shared world between minds, without any relation between the ideas that form the stream of consciousness of any individual mind, we have a Nouism that is entirely unpalatable. As careful as Berkeley and his defenders are to avoid putting anything playing a role akin to matter in God's mind, this goes no distance towards helping us avoid a need for something like that within God's mind. For a broader critical look at Berkeley's view, I direct the reader to 'Berkeley's Idealism: A Critical Examination', by Georges Dicker (2011). For now, we are done with Identity Nouist views like Berkeley's. Even if a successful defence of Berkeley could be mounted, it is still an interesting project for us to consider an alternative Nouism, a Materialist Nouism.

2.4 Kant's Distinction of Appearance and Things

Unlike Berkeley, Kant does distinguish between appearances and things as they are (at least, for the more traditional two-objects interpretation of Kant), and grants the existence of both (Rohlf 2016). This distinction may align very closely with the same distinction I drawn between an experience of an object (its appearance), and the structure that is behind it (the thing in itself). Despite this, the Materialist Nouism of this thesis is not a Kantian view. Kant's view falls into the category of 'Epistemological Idealism' (see p. 11), where there are objects as they are in themselves, but they are so intertwined with our own minds so as to be unknowable. I am more optimistic that we can separate between the appearance and the objects themselves, and learn something about just the latter (Kant 1781/1998, A42/B59):

We have therefore wanted to say that all our intuition is nothing but the representation of appearance; that the things that we intuit are not in themselves what we intuit them to be, nor are their relations so constituted in themselves as they appear to us; and that if we remove our own subject or even only the subjective constitution of the senses in general, then all constitution, all relations of objects in space and time, indeed space and time themselves would disappear, and as appearances they

cannot exist in themselves, but only in us. What may be the case with objects in themselves and abstracted from all this receptivity of our sensibility remains entirely unknown to us. We are acquainted with nothing except our way of perceiving them, which is peculiar to us, and which therefore does not necessarily pertain to every being, though to be sure it pertains to every human being.

Kant, for example, thought that the laws can be known a priori because we construct the world in a way that has such laws (Rohlf 2016). On the Materialist Nouism of this thesis, laws, or at least that which laws can be derived from, form a part of the notion of the world in God's mind – for example, as a decision about how the state of the world will evolve over time.

Another point of difference is that Materialist Nouism places objects, as they are in themselves, in the mind of God, rather than an external world. Materialist Nouism is a *Nouist* view, where everything depends on the mental. And unlike Kant, I treat time as something more fundamental than either objects or experiences of those objects. As for space, we can mean different things by this term, and sometimes that is part of the experience, and sometimes it is part of the objects themselves, so the view presented in this thesis may in some instances be not so far from Kant.

Kant's view is 'Idealist' where Materialist Nouism is not, because Kant places a primacy on appearances where the objects cannot be known, while Materialist Nouism claims that there are objects external our minds that can be known.

2.5 Final Remarks

The role of this chapter and the previous is to give the reader a brief overview of what the view of this thesis is, and how it compares to other views. We have labelled the view of this thesis as Materialist Nouism. We then looked at how it is that the view of this thesis differs from that of Berkeley. Though there is certainly some overlap, and views like Materialist Nouist ones have been called Idealist, this is not a good characterisation. The view of this thesis is explicitly different in an important way from that of Berkeley — in a way that blocks Materialist Nouists from employing his solution to scepticism, and in a way that places less significance on ideas than does Berkeley. From now on, our concern is with characterising clearly what a Materialist Nouist view might be like. That is, a positive project that explains what the view is, rather than a negative program that attacks rival views. Chapter 4 goes into detail regarding what exactly physical objects are.

Chapter 3

Phenomenology

We inhabit a universe of material things that we have experiences of. While we can distinguish between the experiences (the phenomenology) and the things they are experiences of (matter), these seem to be connected in some important way. This chapter is devoted to discussing phenomenology and its role in a Materialist Nouist picture, while the next chapter looks at matter. However, while these chapters are distinct, they step on each other's toes, so some ideas important for the next chapter will be discussed here, and vice versa.

To discuss the contents of this chapter, it will help to have some concrete examples. To that end, I offer the following tools. First, we have a living human body:



Living humans all have working brains:



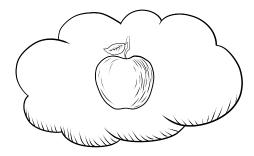
Humans live in a universe of objects like trees, cars, and apples. Here is an apple:



Sometimes we can be deceived, in cases where there is something that resembles the object but is not (e.g., a hologram). We took it that there was before us, say, an apple, but there was instead a very convincing piece of art made to look just like an apple when viewed from just the right angle:



When our bodies are oriented in the right way, we sometimes have an experience as of seeing an object (call this the phenomena). The cloud in the below image should be seen to indicate the phenomenology only, the qualitative part of a particular experience, the what-it's-like's, a perception, a sensation. In this example, it is the seeing of an apple:



Some think that there are things called minds that are importantly distinct from, or independent of, our physical bodies – a separate, mental, substance. We will signify such minds with triangles, and the contents of minds as contained within them:



Finally, we will place all instantiated physical substances that do not depend on anything non-physical for their existence inside a square, as a cousin to the triangle:



This indicates physical *substances* and not merely physical objects that may or may not reduce to something else (e.g., the mental). To be analogous to the 'mind' symbolism, we should surround every such physical object with

a square, but that would be too tedious (some physical objects are rather small, and there tends to be a lot of them). So we will surround each mind with its own triangle, but each physical object will be inside the same physical box as every other physical object, indicating that they are part of the same physical universe. I will, throughout this thesis, use the term 'universe' as a way to refer to all of physical reality, including other universes or a greater multi-verse if such exists.

With these components we can represent a variety of views. Consider first a Non-Reductive Physicalist picture as outlined in Figure 3.1. There is some object (an apple) in the universe, and photons hit the retinas of the human body, and along the way these result in changes in the brain. The changes in the brain lead to there being (in cases with no deception) an experience as of seeing the apple. We have an apple, a causal link between the apple and the body, with changes in the body leading to changes in the brain, and the brain being in those states leads to some phenomena (phenomenology) being experienced. The phenomena is dependent on, but not reducible to, brain states. While there is an arrow going only from the brain to the phenomenal, this should not be taken to be an Epiphenomenalist picture. The cloud only represents the phenomenal, and not the mental as a whole. It does not indicate anything about one or two way interaction between brains and the mental (if, on that view, such things are distinct).

For the Identity Physicalist, particular brain states are seen as identical to the so-called phenomenology, so the picture looks different, with the phenomenology located in the brain and indicated as identical to brain states with an equals sign (Figure 3.2).

Some Physicalists may deny the existence of anything at all like the phenomenal, and so we have a picture much like Figure 3.3. On this picture, there is nothing that corresponds to the phenomenology – there are no whatit's-like's of experiences, nothing that it's like to be a bat, nothing that it's like to be me.

For the Substance Dualist, the picture is different. We have a realm of physical substances, and a realm of mental substances, with interactions between brains and minds. The mind is where experiences are had, where the phenomenology is experienced (Figure 3.4).

For Berkeley, there are no objects, no bodies, no brains, except as terms of convenience that we apply to collections of 'ideas' (as he uses the word 'idea'). On his picture, we have God and our minds, and God gives us the 'ideas', the phenomena, himself, with no basis for the 'ideas' he does give us (see 2.3) (Figure 3.5). There is no particular place in this picture for specific objects like brains and human bodies and apples, since these are human inventions, nothing but our practice of grouping sets of 'ideas' under the one label.

Finally, we have the Materialist Nouist picture, where there are only minds and their content, just like Berkeley. However, unlike Berkeley, there

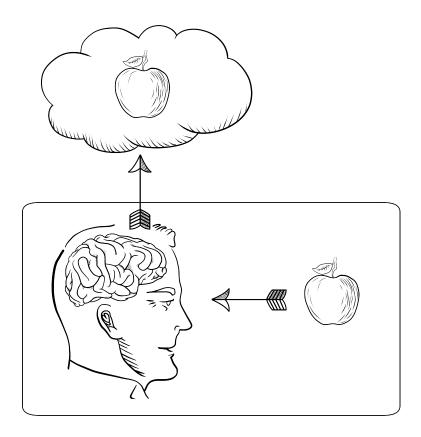


Figure 3.1: Non-Reductive Physicalism

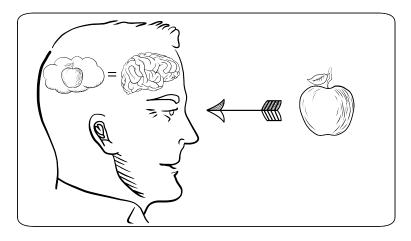


Figure 3.2: Identity Physicalism

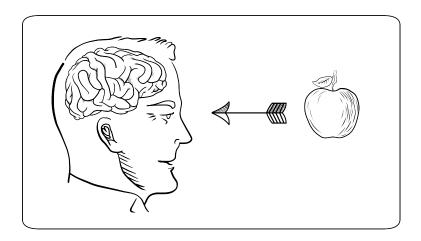


Figure 3.3: No Phenomenology Physicalism

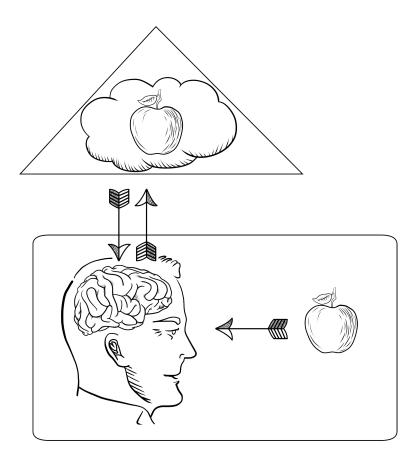


Figure 3.4: Substance Dualism

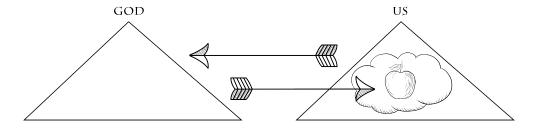


Figure 3.5: Berkeleyan Nouism

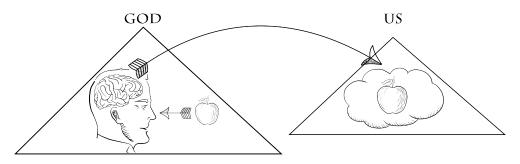


Figure 3.6: Materialist Nouism

is a place in this picture for that which we ordinarily call matter – the physical stuff that ultimately reduces to ideas (not in the Berkeleyan sense of 'idea', but more like archetypes or general ideas) in minds. Those ideas serve as the basis for the experiences God impresses upon satellite minds (on our minds). God has in his mind an idea of a universe with humans and brains and apples, and light reflecting off these apples onto retinas, and brain states changing. It is this blueprint that serves as the basis upon which God decides what experiences – what phenomena – to impress upon us (Figure 3.6):

Note that the apple inside the mind on the right is also enclosed within a cloud, while none of the physical objects in God's mind are. The cloud represents the phenomenology of seeing an apple, in this case phenomenology of perception. The ideas of the physical universe in God's mind are not themselves phenomenal. It is not that God has the same perception that we have, seeing what we see. Rather, God uses the idea (a blueprint) of the physical universe as the basis for generating experiences. This is similar to what Berkeley claimed through the voice of Philonous, regarding his own view (Berkeley 1710/1713/1988, pp. 187-8):

But that God, though He knows and sometimes causes painful sensations in us, can Himself suffer pain, I positively deny...God knows or has ideas; but His ideas are not conveyed to Him by

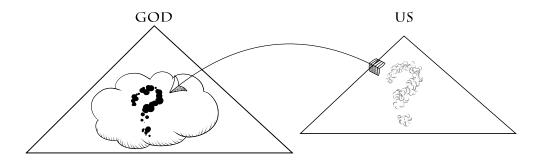


Figure 3.7: Materialist Nouism Swapped

sense, as ours are.

Here, the Materialist Nouist agrees with Berkeley that the experiences God impresses upon us are not also had by God. However, the Nouist need not agree with Berkeley that God cannot suffer pain. The Materialist Nouist picture can be reversed, by allowing for satellite minds to also have an idea (a blueprint) of a physical universe (perhaps entirely different) in their mind, and on the basis of that blueprint impress upon God experiences (Figure 3.7). Berkeley wrote (again through the voice of Philonous) that God does not have any sensations or perceptions because "God is a pure spirit, disengaged from all such sympathy or natural ties" (Berkeley 1710/1713/1988, p. 188), ruling out the idea that God experiences any kind of phenomenology like we do. I do not wish to rule this out. Having this two-way symmetry introduces some simplicity in terms of the kinds of powers that minds have - God's mind and the satellite minds share this power to have in mind blueprints and impress experiences on other minds on the basis of those blueprints: God to impress upon satellite minds, and the satellite minds on God (a hub-and-spoke model; see section 7.1.2). Under such a picture, God does not have sensations of the physical universe in his own mind, but does receive sensations from satellite minds of the physical universe in their minds. Likewise, we (the satellite minds) do not have sensations relating to the idea of a distinct physical universe in our minds, but we do receive sensations from God in the form of experiences of the physical universe which we take ourselves to be inhabitants of.

There are two primary questions that I wish to address. The first is regarding the relationship between the physical and the phenomenal in Figure 3.6. That is, how we move from the physical to some particular experience being had by a mind – to some phenomenology. The second is regarding what things count as part of the phenomenology of experience – what are the kinds of things that God can impress upon us (and us on God)? Alternatively phrased, what are the kinds of things that can appear inside the cloud in these figures?

There are many different possible Materialist Nouist views. The Materialist Nouist picture of this thesis is an experiment to see how far we can get if we insist on the following simple rule (henceforth referred to as 'the simple rule'):

If there's something that it's like to x (some phenomenology of x'ing), then the experience as of x'ing is an impression from another mind

Insisting on this adds some simplicity to our account. We do not need to carve up any list of phenomenology or sensations into 'those from other minds' and 'those from our own mind'. Instead, if there's some phenomenology of it, some experiential character, some what-it's-like, then that comes from outside the mind experiencing it. This is a dispensable claim for the Materialist Nouist, one that we can (and probably will) discard at the end if we find reason to, but will keep for the sake of seeing how far we can go with it. There are some interesting ramifications regarding the role of the brain, and insisting on this rule leads us to a Materialist Nouism that does not differ in practice too drastically from many Physicalist accounts. That is, we may find ourselves with a theory that offers the advantages of a Physicalist account without the disadvantages (specifically, without an analogous 'hard problem of consciousness', a kind of 'hard problem of the physical', for the Nouist). If, in the end, the project fails, we can fall back to a more traditional Cartesian style mind in a Nouist framework.

The result of insisting on the simple rule is that a great deal of what we attribute to minds in terms of desires, intentions, wishes, beliefs, and so on, are not straightforwardly owned by or explained by the mind that has those desires, intentions, wishes, beliefs, and so on. I may sometimes speak as though the minds have desires, intentions, and so forth, but this is only speaking loosely. I do not mean to imply that they do, except as an *explicit* weakening of the simple rule above. For example, when saying that minds 'communicate' it should not be seen as implying any intentions in communication – just that there are signals of a sort being sent by one mind and received by another. This chapter is in large part an examination of how we can understand matters around phenomenology if we embrace the above simple rule, and only consider weakening it in section 7.2.1. If we insist that all phenomenology comes from other minds, then we need to be clearer about which things count as phenomenal. That is the topic of the second section (3.2). For now, we turn to intention and deception to better understand the relation between the physical and the phenomenal, assuming (as per the simple rule) that the phenomenology of experiences always and wholly comes to us from God.

3.1 The Physical and the Phenomenal

There are two important relationships I wish to draw your attention to. One relation is between phenomenal states and the way they suggest the world is, and the other is between phenomenal states and the physical states that are in some sense the most direct 'cause' of that phenomenal state. Let us focus first on a relation between phenomenal states and the way they suggest the world is. Consider the way in which some experiences (if not all) present the world as being a particular way. I have an experience with phenomenal content as of seeing an apple before me. There is something built into this experience that represents the world as containing an apple before me. We have two things. First, the phenomenal, which represents the world as being a particular way – makes it seem as though the world is such and such a way (containing an apple before me). Second, we have the way the world actually is – either as containing an apple before me or not (we also have other questions about appropriate causal links and such between the experience and the world, but let us set those aside for now). We have the way the world seems, and the way it is.

When some phenomenal content represents the world as being a particular way, it is said to have intentional content, and in such cases we may call this phenomenal content with an intentional object, phenomenal intentional content. Thoughts, beliefs, perceptions and so forth are taken to be able to be directed towards or about some object. This ability to be directed towards or about is called 'intentional'. There is some object (we might say) that the phenomenal content purports to be about or directed towards, and we call such phenomenal content that is directed towards or about something, intentional content. Intentional content may be directed towards or about objects that do not exist. I may have a belief about people that do not exist, or have a perception as of seeing an object that does not exist. Given that intentional content presents the world to us as being a particular way that it is not, we can then talk about the accuracy or inaccuracy of such content. If the world is the way that the phenomenal intentional content presents it to be, then it is veridical, as in Figure 3.1. If, however, it seems to us that the world is some way, that there is an object of the sort represented to us in the phenomenal intentional content, and yet no such object exists, then the experience with that phenomenal content is non-veridical, as in Figure 3.8.

Compare the standard and the deceptive pictures, and examine what has changed. In each of these pictures, the phenomena remains the same, the brain state remains the same, the human body remains the same, and the causal processes can remain the same perhaps even all the way to the object itself. All that has changed in this story is the object, or some physical states in the vicinity of the object. It is a different kind of object to what it seemed to us, an object such that were we to learn it was the object it

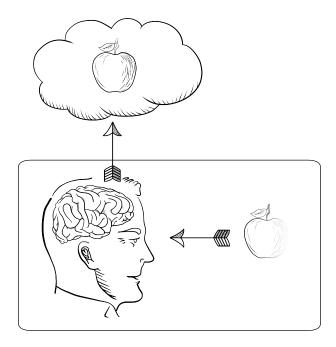


Figure 3.8: Deceptive Picture

is, we would say that we were mistaken – that it seemed to us that we saw an apple but we did not. We would, in such cases, judge our experience as deceptive. So we have two pictures, which differ only by whether there is an apple or a simulacrum of an apple (hallucinations have the point of difference beginning with the brain rather than the apple, with causal processes that lead to the brain being in the right seeing-an-apple state even though no apple is present – hallucinations are no counter-example to the point that is about to be made).

The plausibility of such a story rides on the same intuition behind brain in a vat examples, where we keep all the neural firings the same, but vary the state of the wider physical world drastically. The brain in the vat story has some plausibility to it because we are inclined towards physical theories that have experiences, or the phenomenal, as only depending directly on brain states. Such experiences may depend indirectly on states of the physical world further away than the brain, but only insofar as those more distant states are able to causally influence the brain. It is a contingent question as to whether or not it is solely brain states upon which the phenomenal depends, or whether our experience as of seeing an apple depends on more than just the brain being in the appropriate states (or undergoing the right processes). It will not matter if it turns out that experiences do depend on more than just brain states, and that the brain in a vat is physically impossible, and we would rather need a body in a vat. For simplicity, let

us talk as though it is the brain states alone that are important, and the considerations in this thesis can be modified suitably if that turns out not to be the case – for example, by having a body in a vat. And so, it is sufficient (we shall say) to have a brain in a vat, and trigger the right kinds of neurons firing, in order to produce an experience as of seeing an apple, even though no apple is present.

That is a lightning quick outline of one important discussion among philosophers regarding representation, intentional content, deception, and so forth. It revolves around the relation between the way in which the phenomenal content presents the physical world to be, and the way the physical world is. More specifically, it is between the phenomenal *intentional* content and the way the physical world is.

There is a separate relationship I wish to draw your attention to, also between phenomenal states and the physical world. It is *not* the same as the representation relationship outlined above. It instead concerns the relationship between phenomenal content of any sort, not just phenomenal intentional content, and the physical states most directly explanatory of the phenomenal states. It is a relationship that becomes particularly important to consider when we are thinking about Substance Dualist and Materialist Nouist views, though it is important (but less obviously so) for other views as well. On a Cartesian style Substance Dualism, we have brains (or particular parts of brains) and phenomenal states (or mental states, more broadly), and a relation between them. The brain being in particular states leads to some mind having one experience or another. Consider, for example, Figure 3.9. We have the brain being in state A, which leads to the mind having an experience as of seeing an apple. We have the brain being in state B, which leads to the mind having an experience as of seeing a tree.

Brains are (on this Substance Dualist view) physical substances, while minds are mental substances. The two have causal relations, but are not the same thing. Suppose that the relation between these two things is law-like, that there are psycho-physical laws that connect brain states to phenomenal states, and that God is free to make the causal relations of these psycho-physical laws other than they are. For example, as in Figure 3.10, where brain state A leads instead to an experience as of seeing a tree, while brain state B leads instead to an experience as of seeing an apple. Here we have switched the link between brain states and phenomenal states. If the relation is law like, and the laws are created by God, then presumably it was (and is) in God's power to make either of these the case. The relation between brain states and phenomenal states is, in such a story, contingent.

Brain state A comes to be associated with an experience as of seeing an apple, and brain state B comes to be associated with an experience as of seeing a tree, because (on the story we are considering) God has decided so and could have decided otherwise. We can then think about what role these phenomenal contents play. We have Cartesian minds which interact

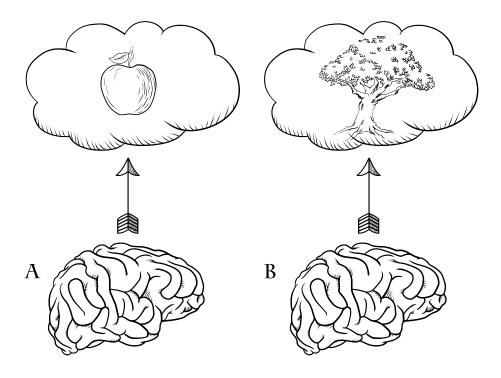


Figure 3.9: Brain to Phenomenology, Case A

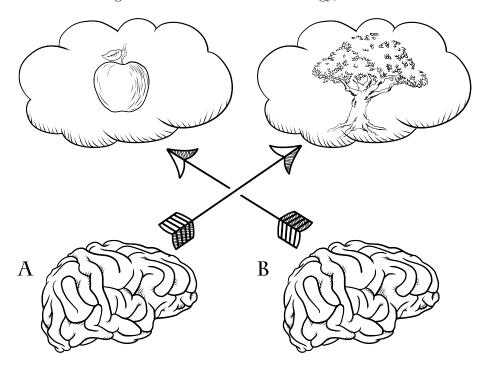


Figure 3.10: Brain to Phenomenology, Case B

with the physical world, and the physical world with the Cartesian mind. The role that is played by phenomenal content is that it stands as a sign or a symbol or a token for the brain state that it is associated with. God has decided that brain state A will be signified by the phenomenal experience of seeing an apple. There is some act of God, tying the experience as of seeing an apple to the brain state A. In this story, the experience as of seeing an apple plays a similar role of symbols in language or art, where we have signs or symbols and so forth that may be signs of things that they are not in any sense the same as, not even a likeness of. The fact that these signs or symbols in language and art signify what they do is contingent, an invention or artefact of culture or the kinds of creatures we are. So too with phenomenal content, which signifies the brain states they do because of a choice by God, and not because of any necessary relation between brain states like A, and phenomenal states like seeing an apple.

This is the second relation, one where we are concerned with the relation between phenomenal content and the physical world, at the point where the physical world is most directly responsible for my having of some particular experience. We have a mapping from phenomenal states to physical states, and vice versa, with phenomenal states being signs of physical states. This is not the same as the earlier 'representational' relationship, which is concerned exclusively with intentional content (see Figure 3.11). If it turns out there is non-intentional phenomenal content, then that non-intentional phenomenal content stands as a sign or a symbol for brain states just as much as intentional content does. Suppose that one thinks that pains and itches are non-intentional. The brain being in state C leads to my feeling of pain. The feeling of pain, the phenomenal content, stands as a sign or symbol of the underlying brain state C.

Moreover, unlike the 'representation' relationship, deception is not to be analysed here. The phenomenal content is not (on this telling of the tale) a likeness or imitation of the underlying physical states, does not share a resemblance to it. Phenomenal states are fundamentally different things to brain states. There is no more resemblance between trees and the English word 'tree' written on a page, than between brain state B and the experience as of seeing a tree. God, having decided that B should be signified by an experience as of seeing a tree, makes no mistakes – never fails to impress upon us an experience as of seeing a tree when our brain is in state B. Deception is to be analysed in terms of the earlier discussed 'representation' relation, and not here in the context of the mapping of phenomenal states with brain states.

On the Materialist Nouism of this thesis, the story is of a similar character to that of the Cartesian Substance Dualist. The physical world in God's mind is in a particular state, and that state includes brain states. Following the simple rule earlier, all my experiences – all the phenomenal content – is impressed upon me by God on the basis of the underlying physical world.

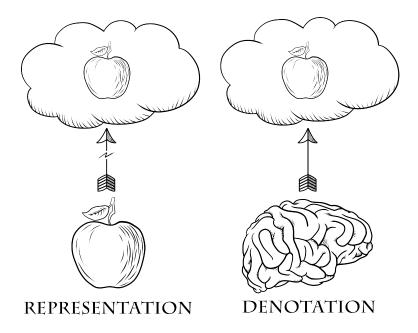


Figure 3.11: Phenomenal Relations

The physical world in God's mind is a different kind of thing to the phenomenal content impressed upon me by God. We need to consider, in the same way as we do for the Cartesian Substance Dualist, the relation between physical states (and specifically brain states) and the phenomenal content of my experiences. The phenomenal content of experiences stand as signs or symbols of underlying brain states.

To distinguish this relation from the representation relation, let us call this the mapping relation. On some Cartesian Substance Dualist and Materialist Nouist views, the way in which some phenomenal content comes to signify (be mapped to) particular physical states is contingent. There is some decision by God to signify brain state A with some mind having an experience as of seeing an apple. However, the claim that this is contingent is a preliminary claim that we may dispense with. We could also insist that the relation is not contingent but rather necessary, and that if God were to show us phenomenal content other than what he does, then that would be a sign for a different physical world. It may be that there are many different mappings between phenomenal and physical states that God could choose – if we treat phenomenal content as akin to sentences in a language, then there are many different mappings from phenomenal states to possible physical worlds that render these sentences true. Or it may be that there is just one way to map the physical to the phenomenal.

It is possible that Berkeley, or an imaginary Berkeley converted to Ma-terialist Nouism, held a similar view of experiences being a means of com-

munication, akin to sentences in a language. Even though what Berkeley wrote was in contradiction with Materialist Nouism, perhaps ultimately he was not so far from it (Fritz 1954, p. 565):

If man's perceived ideas are the language in which God communicates with men, then it is possible that there is no more similarity between the symbols of the language and their referents in this case than there is in the case of other languages. Berkeley admits that the words of human languages are not identical with, like or copies of the ideas they symbolize, and he offers no evidence to the effect that the language of God differs from the human in this respect. The analogy between ideas of perception and language seems, then, not only compatible with, but even to support the statement that Berkeley was willing in theory to accept abstract ideas in the mind of God.

In summary, we have two interesting and distinct relations between the phenomenal and physical states. One is a much discussed representational relation between the way the phenomenal suggests the physical world is, and whether or not the physical world is that way. The other is a mapping between the phenomenal states, and the physical states most immediately causally or explanatorily responsible for them, the physical states that those phenomenal states are signs of.

3.2 The Phenomenal List

We have looked at the relation between the physical states most directly involved in the production of experiences, and the experiences themselves. This completes the discussion regarding the relation between physical states and phenomenal states: external objects like apples might be important in an explanation as to why we have an experience as of seeing an apple (more on that in Chapter 4), but it is brain states that are more directly involved in explaining why we have the phenomenal states we do. Now we're trying to answer the question about which kinds of things belong inside the phenomenal cloud in our diagrams. On Materialist Nouism, everything (of the sort we are attempting to account for) reduces to the mental: to minds and their content and their relations. However, having said that, there are some parts of the world that I wish to call 'the physical world'. We can distinguish between the physical world in God's mind on the left in Figure 3.6, and the mental contents inside us on the right hand side. While the physical world in God's mind is also mental content, I here wish to distinguish specifically between the mental contents that would be called 'the physical world', and the phenomenal mental contents that are experiences

of that world. Phenomenal states are not – I stipulate – physical sates. Physical states themselves never appear inside the cloud.

Brentano, who is responsible for the use of the term 'intentionality' in modern philosophy, stated that a hallmark of the mental is intentionality (Brentano 1874/1973, p. 89):

This intentional in-existence is characteristic exclusively of mental phenomena. No physical phenomenon exhibits anything like it. We can, therefore, define mental phenomena by saying that they are those phenomena which contain an object intentionally within themselves.

The reasoning here is, of course, invalid. If intentionality is peculiar to mental phenomena, it does not then follow that all mental phenomena are intentional. If we take Brentano's definition of the mental as a stipulation rather than a conclusion of an argument, what remains to be seen is whether this definition matches closely enough a list of things we would typically call 'mental'. Here is one such incomplete list: beliefs, desires, intentions, feelings, itches, pains, sensory states, introspective states, emotions, contemplating, thinking, deciding, entertaining a thought, and so on.

Note that while many of the items on this list have intentional objects, some would argue that not all do: for example, itches, pains, and certain emotions. One can feel an itch, or a pain, or be feeling sad, without there being any object that the itch, pain, or sadness is directed towards or about. We will therefore reject the characterisation of 'the mental' as 'those phenomena which contain an object intentionally within themselves'. Brentano may talk that way, but it is not a language that is close enough to the way everyone speaks to be used without more being said. Some of the (typically called) mental contains, so to speak, an object intentionally within, but it is by no means an agreed requirement for counting as mental (in ordinary parlance) – or, more specifically, for counting as something that can appear within the phenomenal cloud in one of our diagrams. Let us suppose that there are some phenomena that have no intentional objects (if it turns out that all do, that has no significant bearing on the Materialist Nouism under consideration).

Before discussing the items on this list, let me take a brief interlude to highlight that the way in which I use the term 'mental' also does not match typical parlance. My list of mental things includes the physical world, existing as a non-phenomenal idea in God's mind. That is, the physical world is a mental content of God, but is not something that God experiences as we experience it. God does not see trees as we see trees, or feel pain as we feel pain – at least, not of the physical world in his mind. Just as Brentano's characterisation appears to differ from some ordinary speakers, so too does mine, but I hope for good reasons that have been made clear and will become

clearer. There are minds and their content, and the contents of minds are to be called 'mental'.

Let us return to the matter at hand. Having examined the relationship between the physical and the experiential/phenomenal, our project now is to look at what things may appear inside the cloud on our diagrams, while keeping in mind that everything inside the cloud in a mind (experiences had by that mind) comes to that mind from another mind. For something to be in the cloud, it must be experiential/phenomenal, because the cloud denotes specifically the phenomenology, that which is currently being experienced by some mind. For some of the items in the above list, it is clear that there is some phenomenal component: there is something that it is like to feel anger or sadness, to be itchy, to be in pain, to see, hear, or taste. As a result, I intend to include all these things inside the cloud – able to be impressed upon us from God and, according to the simple rule, always are impressed upon a satellite mind by another mind (by God). What about more cognitive states like believing, desiring, intending, thinking, deciding, and entertaining a thought? What I want to say (and not just I) is that there is indeed some phenomenal aspect to each of these things. In particular, there is something that it's like to think about or entertain a thought, and, sometimes, to believe, desire, intend, and so on (more on this below in section 3.2.1). Phenomenology of these sorts are called *cognitive phenomenology*. If there are cognitive phenomenology, then on the simple rule of this Materialist Nouism, such phenomenology comes from God and not from the mind that is entertaining the thought, believing, desiring, intending, and so forth.

The existence of cognitive phenomenology is controversial, but I think reasonable to assert. The claim is, put simply, that there is something that it is like to think, remember, desire, and so forth – some phenomenology to cognitive states. In the introduction to cognitive phenomenology, Tim Bayne and Michelle Montague argue that we find versions of cognitive phenomenology endorsed by historical philosophers such as René Descartes, Franz Brentano, Edmund Husserl, Immanuel Kant, and William James (Bayne and Montague 2011, pp. 4-5). Despite some historical roots to the idea of cognitive phenomenology, the orthodoxy of recent times has been to say that there is no distinctive phenomenology of cognitive activities. While there may be images or other sensations associated with activities like thinking, these are secondary effects, and not the substance of thought itself.

What the cognitive phenomenologists claim is that the phenomenology of the cognitive is distinctive and proprietary (Bayne and Montague 2011; Pitt 2004). It is distinctive, in the sense that different mental states have distinct phenomenology. It is proprietary, in the sense that there is a phenomenology of the cognitive that is unique to the cognitive. I wish to join with the cognitive phenomenologists and claim the same: there is some phenomenology to cognitive activities like thinking, remembering, desiring, and

so forth, that is distinctive to each and at least in part proprietary. Bayne and Montague (2011) call the orthodox view 'conservative', and the cognitive phenomenology view 'liberal'. It is possible that the disagreement between these conservatives and liberals is merely verbal, a result of using our words differently (ibid., p. 11). I am sympathetic to such a possibility. The reader should keep this in mind, and take note of the way I use words, and see if the claims I make follow from the way that I use these words. I mean to include different things under terms like phenomenology and experience than do the so-called conservatives, and the way I use these terms may differ from the way that the reader wishes to speak.

The consequences for our Materialist Nouism, of endorsing cognitive phenomenology, are roughly as follows. In having specified that all the phenomenology of our experiences come from God, it entails that cognitive states like remembering, thinking, some parts of believing, etc, all come from God. There are aspects of remembering, thinking, believing, that can sit inside the cloud in a mind, as experiences given to that mind by another (e.g., God). And by stating that these things come from God, it leaves us room to situate much of the explanation of these cognitive states in the brain (since the 'brain' resides in God's mind). Why do I remember some things more clearly than others? It is not, on this view, because of weaknesses of mind, but rather because God impresses on me clearer or weaker memories, based on attributes of the brain. Change the brain, and you change the phenomenal character of memories as impressed upon us by God. Returning to Figure 3.6, the basis upon which God decides what image to impress upon us on the right is determined by the idea of the physical world – including brains and human bodies – that God has in mind on the left. This is in contrast to a typical Cartesian mind, where things like remembering and thinking are supposed to be faculties of the mind rather than the brain, and therefore able to continue beyond death of the body. This Cartesian view is akin to placing the source or basis for the phenomenology of remembering, thinking, and so forth, inside the mind in Figure 3.4, but outside the cloud, with arrows pointing between them (see Figure 3.12). The Nouism of this thesis ties these things strongly as originating from our brains, and therefore from God within whom our brains exist as ideas. In this sense, it is a Nouism that aligns more closely with typical Physicalist accounts of the brain and mind (I will say more about this in later chapters). Of course, one could embrace my challenge to have all phenomenology come to us from God, but offer an alternative story about what it is that counts as phenomenology – that is, what it is that can sit inside the cloud. By defining terms differently, they can tell a different story about what belongs to the mind experiencing, and what comes from outside, one that is closer to the Cartesian mind. The story in this thesis is of one that includes cognitive phenomenology within the cloud, but it is not the only story we could tell.

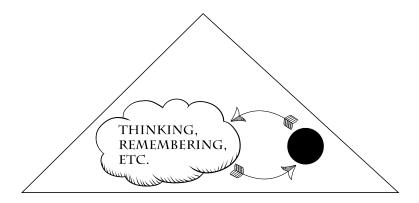


Figure 3.12: Cartesian Mind

3.2.1 Beliefs

Believing is typically taken to be a cognitive state, and can be said to have some phenomenal characteristics of its own. Does that mean beliefs are phenomenal only, just like an image that is there when I look but gone when I turn? Beliefs are a difficult and interesting case. When producing a list of paradigmatic physical things and another list of paradigmatic mental things, beliefs are sure to appear on the list of mental things. However, unlike typical phenomenal states, beliefs are persistent, standing. A particular experience is fleeting, episodic, and disappears shortly after – seeing a tree disappears when we turn our head, remembering a past holiday disappears once we turn our attention to something else. Beliefs, however, persist. You may ask me if I believe Earth is spherical and I answer yes, but even though I am not reflecting on your question an hour from now, we still would say that at that moment I believe Earth is spherical.

Intentional states are taken to be *about* something. When there is an appearance of a red ball, I take it that the experience is about a red ball, or represents that there is a red ball. When considering which mental states can be *about* something, beliefs are a paradigmatic example. Beliefs are true or false depending on whether or not the way that they represent the world as being is the way the world actually is. Supposing that there are intentional states, is there a phenomenology to intentionality too? Some what-it's-like'ness for intentionality? Views that answer 'yes' to this question are putting forward a Phenomenal Intentionality Theory (PIT). There are three views to consider here (Bourget and Mendelovici 2016):

Strong PIT All intentional states are phenomenal intentional states.

Moderate PIT All intentional states either are phenomenal intentional states or are at least partly grounded in some way in phenomenal intentional states.

Weak PIT Some intentional states are phenomenal intentional states.

I likewise wish to say that there is something about the phenomenology of our experiences that is directed, or about, objects in the physical world. I am not saying that there must be physical objects in the world corresponding to the intentional object, but rather the phenomenology carries with it some sense that it is *about* something – that an experience is as of a red ball, and not just as of shapes and colours that we then interpret as a red ball. There is something to seeing a red ball over and above seeing redness and roundness, some intentionality built into the experience.

It is clear that beliefs are intentional states, since they are about or directed towards something else in just the same way that remembering or desiring can be. I can believe that my garden has a lemon tree, and I can see that my garden has a lemon tree. And yet there is a difference in the intentionality of believing when compared to the intentionality of seeing: in a few moments I will no longer be seeing that my garden has a lemon tree, while I will continue to believe. This persistence of beliefs beyond the moment makes it hard to assert Strong PIT. Beliefs are said to have intentional content, to be about something, even when we are not attending to them, even when there is no phenomenology.

Similar considerations apply to other standing states like desiring or hoping, where there can be both a fleeting phenomenological component when we are reflecting on our hopes or desires and also standing states that persist when we are no longer so reflecting. There is, I think, a phenomenal component to believing or desiring or hoping, when such beliefs are brought to our attention. There can be, in some instances, something that it is like (some phenomenal component) to desire or believe or hope. But there is more to such purported mental states than just the phenomenology, because these things are standing even when there is no phenomenology.

I have said early in this chapter that we are following one simple rule: if there is some phenomenology of something, then that phenomenology (experience) comes from God. That is, the occurrent, fleeting part of believing or desiring or hoping is impressed upon me from God. The phenomenology of beliefs, hopes, desires, and so on, is clearly to be labelled as mental. It is something experienced by my mind, directly impressed upon me from God, and is not physical as I use the term 'physical' (see Chapter 4). However, beliefs and hopes and desires are taken to be standing, more than just the fleeting phenomenal experience that sometimes accompanies them. When we use these words, we use them in a way that allows for me to be believing that, hoping that, desiring that, even though there is no phenomenological component to these beliefs, hopes, or desires in that moment.

Refer again to the Materialist Nouist picture in Figure 3.6. That which we call the physical universe is located as a blueprint – a non-phenomenological idea (God does not experience the physical universe as we do) – in God's

mind. In our minds, we have experiences given to us by God, experiences that are chosen by God on the basis of the kind of physical universe he has in mind. When analysing a word like 'belief', it would be convenient if there's just one place we could point to in this picture and say "here are beliefs". However, sometimes the way that we use words does not fit neatly with the way the world is, and this is one of those cases. For example, when we consider the word 'light', we would not ordinarily say that a room that is dark is full of light. Yet scientists, having understood something of how vision works, have come to call electromagnetic waves 'light'. There are particular wavelengths of these electromagnetic waves which, when present in sufficient volumes, would lead us to say that a room is not dark but full of light. And yet, if we identify 'light' with just electromagnetic waves, we would then be able to say that some rooms that are dark are actually full of light – for example, the cosmic background radiation, or infrared, and so on. In short, when considering our ordinary use of the word 'light' we cannot point to one thing and say "that is light". We need to say something about particular wavelengths, and the kinds of things humans are able to see, and so forth.

So too with beliefs, where the way we use the word does not map neatly to any one thing. Our ordinary use of this word involves something that persists or stands, and something that is occurrent or fleeting. The fleeting part is the right hand side of 3.6, where God impresses upon us some experience as of believing that such and such. The explanation for why we have that experience as of believing is grounded in the kind of physical universe God has in mind. There is, then, a component of 'belief' that resides not in the mind that is said to have the belief, but rather inside God. It is more proper therefore to say of beliefs like 'I believe my garden has a lemon tree' that these belong not to the mind having the experience as of believing, but rather of the human body that is located in that garden. More specifically, that there is a central component of beliefs that are located in brains.

If we are talking about the phenomenology of beliefs or desires or hopes, then those are experiences had by minds like ours. If we are talking about beliefs or desires or hopes as things possessed by something, where we say 'he believes such and such' even though he is not thinking about it at this moment, then we are talking here not about the phenomenology but rather about the persisting belief. This persistent part resides in the physical universe, inside the mind of God. It is an attribute of human bodies with brains, rather than an attribute of the mind which sometimes has an experience as of believing such and such. Changes to the brain, on this picture, result in changes in beliefs or hopes or desires, which result in changes in the phenomenology of believing or hoping or desiring. The mental component is the phenomenal, the experience had by a mind. The physical component is in the states of the brain and body of the human body that the mind is having an experience as of being.

It is not so strange for one who thinks that there are minds to locate the significant part of beliefs in the physical universe. Take, for example, hopes and desires. There is much about our hopes or desires that is grounded in our biology. We have romantic desires which are grounded, in part, in a biological pressure to reproduce. We hope for things like community with other humans, desire shelter of particular sorts, we hope that we will not be injured, and so on. If we were different biological creatures, our hopes and desires could easily differ. We should not be surprised that some of what we call beliefs, hopes, or desires, is to find its explanation in our brains. I take this the whole way, and say that *all* of the standing part of what we ordinarily call beliefs, hopes, desires, are located in the biology – the brain and body of some human.

Let us take seriously the claim that there is some phenomenology to believing (hoping, desiring), and there is also some persistent place in which those beliefs are said to live – the brain. Furthermore, we assert that there is some intentionality to the phenomenology of beliefs. It is built into the experience as of believing that it is about something. If so, that particular intentionality disappears when the phenomenal side disappears, even if the belief persists. And yet, the persistent part of the belief is also about something, directed towards something. There is an intentionality to belief that persists in the absence of the phenomenology, that makes it such that the belief is about or directed towards something. In short, there is an intentionality to the phenomenology of belief as well as to the persistent storage place of a belief (the brain), and these two cases of intentionality seem separable.

This persistent intentionality is non-phenomenal, and, on the view presented in this thesis, entirely physical. The brain, in this instance, can be said to be a machine for modelling. The brain itself models the universe, and in that sense can be said to be about or directed towards something else. As Jakob Hohwy describes it as part of a Predictive Coding view (Hohwy 2016, p. 260):

[...] the brain is an organ that on average and over time continually minimizes the error between the sensory input it predicts on the basis of its model of the world and the actual sensory input

We will say more about the brain and its role in a Materialist Nouist framework in the following chapters. Regarding intentionality, there is much more that needs to be discussed here that we will set aside. For example, why the brain (as a physical object) can be a model while sand on the beach is not, the special role of the brain as a modelling machine and how this works within other views, and whether this means we have two distinct senses of the word 'intentional'. I suspect that there are indeed two senses of the word 'intentional' here: one for the way in which a phenomenal state can seem to

be about something, and the other for the way in which a thermometer can be about temperature (or beliefs residing in the brain's model of the universe can be about the universe). For my part, it is clear that both beliefs (which are persistent over time) and sensory experiences have intentionality in the sense of being about or directed towards something. Whether or not Strong PIT rules out beliefs being intentional depends then on whether we intend to use the word 'intentionality' to apply to anything that can be 'about' in this sense, or whether we want to reserve it for purely phenomenal parts. The way some of the disagreement here falls out will depend on how we use our terms. For this thesis, I will be using the term 'intentional' to refer only to phenomenal intentionality, while keeping in mind that I think that the persistent part of beliefs and hopes, and even things like weather models and thermostats, can be 'about' something else without involving any phenomenology.

3.2.2 What's left for minds

It may seem at the end here that there is nothing left for the satellite minds – for us – to do. The physical universe is in God's mind, and the experiences – even of thoughts and beliefs and desires – comes wholly from God, either as part of the physical universe in God's mind, or as experiences that God impresses upon us. Things like thinking, believing, desiring, and so forth, are typically seen as some of the things that originate from the mind that they are said to belong to. If I put all of this into God, where then is there anything left for the satellite minds?

One could certainly formulate such an Epiphenomenalist Materialist Nouism. That is not, however, my project, and there are ways to expand our theory out to allow for two way action, with something going from the satellite minds back to God. Figure 3.6 is a simplification showing only the universe in God's mind, and what goes from God to us. We may also have a similar setup travelling the other direction, wherein we have ideas of physical universes in our minds which we do not experience, but our minds use as the basis for impressing experiences upon God (Figure 3.7). This symmetry of powers ensures that there is two way interaction occurring. And with two way interaction, there is room for our minds to have influence over what the blueprint of the physical universe God has in mind is like, and therefore indirectly over what kinds of experiences we have. This possible kind of physical causation will be outlined in more detail in section 5.2.1.

3.2.3 The Cloud

So at the end, we have all and only the phenomenal as appearing in the cloud, impressed upon us by God, and the phenomenal includes (what-it's-like to have) itches, pains, desires, beliefs, thoughts, and so on. There is something

about some of these that persists beyond the phenomenal – beliefs persist even when we are not thinking about them. Nevertheless, there are some aspects of believing, desiring, and so forth that are occurrent and fleeting and can be found within the cloud.

3.3 Bringing It Together

If the mapping between the phenomenal and the physical is contingent, then the story goes like this. God makes a decision, much like creating the legend for a map, to decide which physical states and phenomenal content go together. With a map, not all features of the underlying terrain have signs in the legend, and likewise not all possible signs are associated with some feature of the underlying terrain. Only those features and those signs provided in the legend are significant. So too with what God needs to do: not all physical states have some associated phenomenal content, and not all possible phenomenal content has some associated physical state. God associates some of these together. Now, having created the 'legend' so to speak, we need the map itself. For any actual relevant physical states, God will impress upon the satellite minds the phenomenal content associated with those states. By the story we are telling, particular brain states result in particular phenomenal content being experienced.

If the relationship between the phenomenal and the physical is necessary, or not fully contingent, then the story is not quite the same. Suppose, for example, that there is some structure to phenomenal content. If there is structure, then it may be that God is not free to choose just any phenomenal content to associate with some physical state. God's choice is constrained, because different phenomenal content tells a different story about the underlying physical states. If God chooses phenomenal state P rather than Q, then that might imply or mark a different underlying structure. It might be tempting to say that this would be deceptive, but the story is not so simple. The short explanation is that for God to deceive, God must have in mind the blueprint for a different universe, and give us experiences of that instead of the 'actual'. But then that's all that the Nouist claims there is for something to be the 'actual' universe – this 'deception' would be the actual universe, and therefore not a deception. See section 5.5 for a more detailed discussion.

The nature of this necessity might vary. It might be that God has some freedom with regards to the choice of pairings between physical states and phenomenal content, or it might be that there is no choice. The latter would bring the Materialist Nouist into closer agreement with the Identity Physicalist. I do not wish to rule out any of these at this stage, but merely highlight to the reader that they are concerns. These are not idle concerns, either. If there is absolutely no constraint on God's choices, then there is a

very real question about how it is our having an experience of some phenomenal content tells us anything about the underlying physical universe. If it is contingent, then any instantaneous experience could mark out any physical state. God could have chosen any phenomenal content to be the content associated with some given physical state, with no constraints. Without the legend in hand, our minds then know nothing about the underlying universe. It might be tempting to say that, yes, given just one instantaneous experience, we know nothing, but once we build up a collection of experiences, much like building up a collection of sentences in a language, some constraints begin to appear. While tempting, this reply ignores the crucial fact that, on the Materialist Nouism of this thesis, memories of past experiences are themselves experiences. We don't hold the various experiences of our past in hand, but rather we have some instantaneous experience as of remembering those past experiences, and that comes from God. For this to work, we must suppose that there is a sufficient level of trustworthiness to our memories and so forth, enough that we can claim to have built up a body of data about experiences (or observations of the universe), so that the experiences begin to constrain the kind of physical universe that there is. We might think of the way languages work. We have the denotation of words with meanings, and we also have the grammar. While there might be complete freedom to choose any terms to denote the members of the domain, further sentences will rule out new models without allowing any new models. Of course, this story requires there to be something the equivalent of a grammar of phenomenal states as well. And in that sense, there will be something necessary about God's choice.

We can sidestep some of these concerns by saying that not only is there some 'grammar' of phenomenal content that is necessary, but also that there is some necessity relation between associating physical states and phenomenal content. Another solution is to say that once God produces the legend, he somehow communicates that to other minds as well. When those minds experience the phenomenal content, it is in some sense about the physical universe. Of course, how we might say that legend is communicated is not obvious. It has been my project to say that all communication between minds is impressing phenomenal content, and that is all. The communication of the legend itself would have to be in the form of some phenomenal content. Since memories themselves are part of the communicated phenomena, the legend itself could not obviously be communicated in advance. It would, perhaps, have to be built into the phenomenal content. That is, that our experiences of the universe carry with them in some sense their interpretation. And that may not be far from the mark, since our experiences do represent the universe to us as being a particular way. However, in walking down this path, we must keep in mind that the communication of the legend itself as phenomenal content is phenomenal content that itself could have been associated differently. This solution would then require that God is not a liar, that God chooses phenomena that suggests to us a universe that is in fact the actual universe, and to do so we would need to say something about the role of deception. We would then find ourselves saying something similar to Descartes:

I from time to time observed that those towers which from afar appeared to me to be round, more closely observed seemed square, and that colossal statues raised on the summit of these towers, appeared as quite tiny statues when viewed from the bottom; and so in an infinitude of other cases I found error in judgements founded on the external senses...

We would need to wrestle with these facts as Descartes has, and explain how it is that God is not a deceiver, despite saying both that God transmits to us the 'legend', so to speak, but also that it sometimes seems to us that the universe is some way when it is not. We will set these concerns aside for now, as there are a few avenues that could be explored but no space to do so further. Let us just suppose from now on that God, communicating to us through experiences, is a sufficient method for telling satellite minds something about the universe.

3.4 Terminology

A quick note on some terminology. Experience, as I use it, is an instance of some phenomenal content experienced by a mind. While we can talk about phenomenal content in and of itself, we cannot talk about experiences separately from minds. By the very way I intend to use this term, an experience is *had* by some mind. Experiences can be as broad as phenomenal content is broad. If there is some phenomenal content, then that can be part of or the whole of some experience. Since I have stipulated that I use phenomena/phenomenal content to refer to quite a broad range of things, including not just images and sounds, but also so-called Cognitive Phenomenology, 'experiences' as I use the term can be just as broad. I can experience remembering, desiring, thinking that, understanding, realising, and so on.

Regarding qualia, while I will prefer to talk about phenomena and phenomenal content, I intend it to use 'qualia' somewhat interchangeably with talk about phenomena and phenomenal content. If there is some phenomena, then it is a quale. Qualia (and phenomenal content) can be broad or specific. As Peirce (1935, para 223) writes, there is 'a distinctive quale to every combination of sensations...a distinctive quale to every work of art – a distinctive quale to this moment as it is to me – a distinctive quale to every day and every week – a peculiar quale to my whole personal consciousness'.

3.5 Phenomena Come Interpreted

The way that the universe seems to me to be may or may not be the way it is. I may have an experience as of people talking about me behind my back, when in fact no such conversations are taking place. I may have an experience as of a flash of light out of the corner of my eye, though no flash took place. Just because an experience presents to me the universe as being some particular way does not mean that I form the belief that the universe is just that way. Often, I do. Seeing (having an experience as of seeing) a tree before me, I come to believe that there is a tree before me. There may be no conscious (here 'conscious' is to be taken in the same sense as 'conscious' in "I consciously avoided going there") inference that is made to form such a belief. Some propositional content of an experience being taken as veridical in the way it make the universe appear to be, and some not, does not entail that the process of deciding which phenomena to take as presented and which to not is a conscious activity. The phenomenal content of experience represents the outputs of the model in our brain, a model which isn't of just shapes and colours, but of things like rocks and trees and upset people. The propositional content of the experience which arises from this model comes with rich detail about what it is before me. I may watch a movie, and at no point do I make a conscious inference regarding whether or not the things I see genuinely happened. When I see the spaceship taking off from the planet and entering the atmosphere, I do not make a conscious inference to the conclusion that there was no real spaceship, and that some combination of models and computer generated graphics were used to give that impression. Rather, the experience itself is as of watching a fictional story. It is built into the phenomena of the experience that these things are not real. A child asks 'is that real?', but the adult did not engage in any deliberation. When I have an experience as of seeing a book, I do not first see a collection of shapes and colours that I then interpret (either very quickly or slowly) as being a book. Rather, I have an experience as of seeing a book. The fact that experiences come conceptualised has been made all the more vivid by the dress which is seen as different colours by different people. Some have an experience as of seeing a photo of a black and blue dress under a bright indoor light. Others have an experience as of seeing a photo of a white and gold dress with a shadow cast over it¹. In either case, they are looking at the same photo. It is very difficult to experience the dress differently to how one initially saw it. And though one who sees it as of white and gold can be shown pictures of the original dress that unmistakably present it as blue and black, this does little to help them experience the original photo as being of a black and blue dress. The experience comes to us already conceptualised: as of a dress of such and

¹See https://xkcd.com/1492/

such colour, and not as of such and such shapes and colours that we then interpret as a dress. And though it is the phenomenal content that presents to us as being in one way or another, this does not mean we do maintain the belief that it is such and such a way. One who experiences as of a white and gold dress can nevertheless infer or believe that it is a blue and black dress. The experience comes conceptualised, but the experience may not be an experience of the structure it seems to us to represent, and we are free to reject believing that the structure of the universe is the way that it appears to us to be.

The phenomena of experiences are, then, conceptualised things. There is no uninterpreted, raw, or pure experience (Goodman 1976, pp. 7-8):

The catch here, as Ernst Gombrich insists, is that there is no innocent eye ...It does not so much mirror as take and make; and what it takes and makes it sees not bare, as items without attributes, but as things, as food, as people, as enemies, as stars, as weapons. Nothing is seen nakedly or naked.

I do not have presented to my mind (so to speak) some raw input involving colours, shapes, and so on which I then analyse and interpret (contra sense-data theories like that of Russell (1921), which take there to be a core of sense-data upon which our interpretation depends). Hilary Putnam (1999, pp. 154-9) has defended a similar idea to that which I endorse, where what we see are these higher level objects, and not (just) the more fundamental components from which they are built. The concept comes bundled in with the experience. I look across my room and see a *couch*, and not just patches of colours, shapes, and so on, which I then match to some pattern and conclude is a couch. At some level in the brain, such pattern matching (or other such computation) takes place, but that is at a level prior to the experience itself. We can see this again in the difference between an expert and a novice in some domain of expertise. When someone is looking to buy a new house, they may have an experience as of seeing a lovely kitchen (where the loveliness is built into the experience). When a carpenter looks at the same kitchen, with the same photons hitting their retina, they have an experience as of a poorly constructed kitchen. Their 'eye' is trained in ways that the ordinary person's is not, so that it changes the character of their experience. As another example, imagine we were aboard the spacecraft of an advanced alien species. We look at a wall, and we have an experience as of seeing a nice ornate wall. When the alien looks at it, it has an experience as of seeing a corridor control panel with built in biometric sensors. The alien cannot help but to experience the wall in the way that it does. Though the visual, auditory, and tactile inputs are the same for each (we may stipulate), the phenomenal parts of experiences differ. Or looking at a picture that seems to make no sense to us, until suddenly we see it as it was intended, and it becomes clear, and then we can no longer see it as the chaotic mess that it first appeared. The difference in all these cases, I stipulate, lies in the brain. That is, were we to modify the brains of each in suitable ways, the qualitative natures of their experiences would change. Change the brain of the human visitor on the alien spacecraft in the right way, and they too have experiences as of a control panel. The primary points here are that the character of the phenomenal parts of experiences take place at a level below normal reasoning, and come to us conceptualised. We might say that, there is something that it is like to see a book, over and above seeing particular shapes and colours that we might think make up the visual experience of the book. What it is like for us to see a book is different to what it is like, for example, for a dog to see a book.

Sometimes, inference plays a part. As I stated above, just because I have an experience as of there being a book before me, does not mean that I then come to accept or believe that there is a book before me. Suppose I wake up in the morning, unable to move, and I have an experience as of a demon sitting on top of me, looking down menacingly. A few moments later, it disappears and I can move again. I do a bit of reading, and come to the conclusion that I was hallucinating. I don't believe there really was a demon on top of me. The next morning, I have the same experience. But I hold the belief that it is a hallucination, no matter that the experience is as of a demon on top of me. I have formed a belief about the structure of the universe through inference. Inference plays a role, but sometimes it can take time for the phenomenal content of our experience to match our beliefs about the structure of the universe. Suppose we have always thought of the products coming from a particular country as being typically poor in quality. We then come to learn that in fact their products are typically among the highest quality in the world. Having learned this, at first, we may have an experience as of seeing those products as poorly made, even though we know it likely isn't. Our belief about the product does not match the experience we have of those objects (which represents them as of being poorly made). But with practice (that is, time for the appropriate models in the brain responsible for this phenomena to be changed, we can start to have experiences as of seeing them as high quality. Inference can sometimes, with effort, lead to a change in the phenomenal content of our experiences.

3.6 Final Remarks

The purpose of this chapter has been to look at the role of phenomenology in the Materialist Nouism of this thesis. Phenomenology, impressed upon minds by other minds, is the sole basis of communication. There is a relation between this phenomenology and the physical universe, such that the physical universe (as an idea in God's mind) is the basis upon which

God decides which phenomenology to impress upon us. Phenomenology is wide enough to even include so-called cognitive phenomenology, including significant parts of believing, desiring, hoping, thinking, and so on. The phenomenology of experience is rich, not just of shapes and colours that we then interpret, but of couches and chairs, of sorrow and joy.

This chapter was focused on the phenomenology. The next chapter is focused on matter – the physical basis which God uses for impressing upon us some phenomena A rather than B. We have by necessity touched on some of the issues that will be examined in more detail in the next chapter.

Chapter 4

The Nature of Matter

The ordinary material objects of our universe – trees, cars, and so on – have two sides to them. There is the way they appear to us, and there is what they are. The way they appear and the way they are is not the same. I may look at the same tree as you, but we are positioned differently relative to the tree and so see it in different ways. Different phenomenology, same tree. The previous chapter was concerned with the phenomenology associated with, say, seeing trees and cars: the appearances. This chapter is concerned with explaining the consistency between our experiences, to make sense of the idea that we can say that different appearances are nevertheless appearances of the same thing – the same car, tree, and so on. This is what I call 'matter' – a very similar notion of 'matter' to that which Berkeley rejected, and which makes this a Materialist Nouism. It is not 'matter' in the sense of physical substances that exist on their own independent of any mind, but rather in the sense of something (subservient to God) that underlies the phenomenal, that gives an explanation of the phenomenal but is not the same as it. Specifically, for the Materialist Nouist, it is the model (or blueprint) of the universe God has in mind as being the actual universe.

No doubt the notion of 'matter' is seen by many to be tied not only to the notion of this particular *something* distinct from the phenomenal that explains the phenomenal, but also to the idea of a *substance*. The Materialist Nouist rejects the idea that there are physical *substances*, but does not reject the idea that there is something behind the phenomenal, which God makes use of, that plays a similar role to the material substances on a Physicalist's view. So what does the Materialist Nouist mean by this word 'matter'? We will allow Hylas to answer for us (Berkeley 1710/1713/1988, p. 164):

Philonous. How often must I inculcate the same thing? You allow the things immediately perceived by sense to exist nowhere without the mind: but there is nothing perceived by sense, which is not perceived immediately: therefore there is nothing sensible that exists without the mind. The matter therefore which you

still insist on, is something intelligible, I suppose; something that may be discovered by reason, and not by sense.

Hylas. You are in the right.

Philonous. Please let me know what reasoning your belief of matter is grounded on; and what this matter is in your present sense of it.

Hylas. I find myself affected with various ideas, whereof I know I am not the cause; neither are they the cause of themselves, or of one another, or capable of subsisting by themselves, as being altogether inactive, fleeting, dependent things. They have therefore some cause distinct from me and them: of which I pretend to know no more, than that it is the cause of my ideas. And this thing, whatever it be, I call matter.

This is what the Materialist Nouist says also, though not enough is said. Philonous himself accepts that there is some cause distinct from himself, to wit, God. Philonous argues that he does not reject 'matter' when taken in this sense, since God is the cause of our various 'ideas' and would hereby count as 'matter', but that this is to change the meanings of the words – when people talk of matter, they are not talking of God but the "extended, solid, movable, unthinking, inactive substance". Nevertheless, Hylas is insistent on not giving up on the notion of there being something subordinate to God, an "instrument subservient to the Supreme Agent in the production of our ideas" (Berkeley 1710/1713/1988, p. 166). For the Materialist Nouist, this instrument called 'matter' is, specifically, the model of the universe in God's mind that serves as the basis for the experiences God impresses upon the satellite minds. This 'instrument' is called 'matter' because it plays the role of the entire aggregate of extended, solid, movable, unthinking things, distinct from and subservient to God, and not any actual substance independent of all minds. It is never sensed or experienced directly, but can only be inferred indirectly. 'Matter', in the common sense of a substance that plays these roles, led to a serious sceptical worry discussed in Chapter 2. Matter, in the sense that I stipulate in this chapter, falls prey to the same sceptical worries, for the very same reasons. The idea or model of a universe in God's mind is just as inaccessible to us as any physical substance is. When it comes to Berkeley's sceptical worry, this model of the universe plays the same functional role in the Materialist Nouist picture as does the notion of 'matter' as a substance in the Physicalist picture. We have sensations – what I call experiences with phenomenological content – of trees, but these sensations are not the same as the tree itself as a notion in God's mind. Whatever way it is that our universe is held in God's mind, it is not our experiences of it. God does not (need to) keep in mind the myriad different possible sensations of that universe, but rather has in mind some

model which forms the *basis* for deciding which sensations to impress upon the satellite minds. This is the difference between a video game encoding the game world in a general way that allows it to produce the required images on the screen at the right time, as opposed to creating all possible images in advance and then displaying them at the right time. We have sensations of the universe, but never access the universe itself, whether we are Materialist Nouists or the original targets of Berkeley's sceptical argument.

This chapter is concerned with investigating the notion of 'matter' in this sense, to see where the (Materialist) Nouist and the (Identity) Physicalist disagree and agree, and how it is we might come to know something about this 'matter', to address the sceptical worries of Berkeley. Unless context dictates otherwise, I will henceforth generally use the term 'Nouist' to refer to the particular Materialist Nouism outlined in this thesis.

4.1 Disagreement on Matter

(Materialist) Nouists and (Identity) Physicalists do not agree about the nature of matter. We both would say that there are trees, cars, brains, atoms, fields and so forth. However, when we break down what it is that each of us means by these words, we find that there is a deep disagreement. Consider some particular examples of Nouism and Physicalism, and what reality is on each of those views. For this particular Nouist there are just minds and their powers: for example, God's mind and the satellite minds, a notion (or model) of our universe in God's mind, and interactions between God and the satellite minds in the forms of experiences impressed on each other. For this particular Physicalist there is just physical stuff and their powers: for example, there are fields or particles, space and time, and the interactions between these fields or particles.

The Nouist and the Physicalist might both agree with the statement, 'There is a tree before us'. However, the Physicalist upon hearing the Nouist's assent may turn to him and claim, "but you don't think there are any trees!". How might we make sense of this? Are there no trees on Nouism? We should distinguish between claims about what exists when doing metaphysics, and what sorts of sentences we are happy to utter in ordinary conversation. When talking about what exists in the context of a discussion about metaphysics, the Nouist will say there are naught but minds and their powers. Take a metaphysical knife that can carve reality at the joints. Slicing at the joints, you will only slice out minds. There will be no way to carve at the joints, and find that you have cut out trees – no slicing minds to find trees.

For the Physicalist, in the context of a discussion about metaphysics, they will admit to naught but physical things – for example, spacetime, or particles and fields, and so forth. Take a metaphysical knife that can carve reality at the joints. This knife, we may think, can carve out particular particles or fields. The question may be somewhat tricky, depending on the exact view of the physics, but certainly on some physical views we could slice between particles and pick out objects. For example, we might slice in just the right part of spacetime, slicing at the joints, and cut out a particular tree (at a particular time). On this way of thinking about matters, there are trees on the Physicalist view because we can (arguably) slice them out when slicing reality at the joints.

The Nouist cannot do the same thing. There is no carving of reality at the joints that gets us back a tree. There are only minds, and these minds are not positioned in any kind of space, and so have no positions that would allow them to be arranged tree-wise. Moreover, if they could be arranged tree-wise, minds are not the right building blocks for trees. We also cannot carve a mind into parts. There are, on this telling, no trees on the Nouist view.

Ordinary talk about trees for the Materialist Nouist is to be translated into talk about minds and their powers. God has in mind a model or blueprint (see section 4.2 below) of a universe – a special universe model picked out from all the possible universe models. If the Nouist says, " $\exists x: x$ is a tree", it can be true when translated to the Nouist's claims about reality – true_N:

According to the model of the universe in God's mind,
$$(4.1)$$
 $\exists x: x \text{ is a tree' is true}$

This model of the universe is used as the basis for God impressing experiences upon satellite minds. Therefore, when the Materialist Nouist claims that a particular tree is responsible for their experience of seeing a tree, what they are saying can be understood as follows:

God gives me these particular tree impressions because according to the model of the universe in God's mind, there is a particular tree positioned appropriately before me that causes these tree impressions (4.2)

Therefore, when the Materialist Nouist talks about trees and brains and so forth, they are not talking about any structures that can be found by cutting reality at the joints. Rather, this is short-hand talk about the model of the universe that God has in mind, and what things we might say are true of that universe. We might say, for example, that according to the model of the universe God has in mind, there are trees. God then uses this

model of the universe he has in mind as the basis for impressing experiences on other minds. When deciding what experiences to impress upon a mind, God consults the model, and on that basis gives the impression as of, say, seeing a tree. We can say what a tree, or talk of trees, amounts to on the Materialist Nouist view (as described above), but not so easily what a tree is. For the Nouist, when carving reality at the joints, there are no trees to be found, while there are on the Physicalist's view. There is deep disagreement between these views when considering them at their most fundamental levels.

4.2 Agreement on Matter

A Nouist and a Physicalist are standing together in a garden, looking at a tree with a large branch protruding to the right. The Nouist says to the Physicalist, "See this tree? If I were to move around behind it and observe it, the branch that protrudes to the right would then be protruding to the left." The Physicalist nods in agreement. The Nouist thinks of himself that he speaks plainly and truthfully. The Physicalist agrees with what the Nouist says here, and on many other occasions as well. And yet, their views are deeply incompatible in the way described above. This Nouist thinks that there is nothing beyond minds and their powers: specifically, nothing beyond God and the satellite minds. This Physicalist thinks that there is nothing beyond physical substances and their powers, specifically, particles or fields arranged in space (and so on).

The disagreement between these two is at the foundations, while the agreement comes when we converse about ordinary every day matters. In this section we look to answer the question of how it is that these two radically different foundations can result in the same empirical predictions and agreements in higher levels of conversation. To aid us, let us answer the question of what it is that is in God's mind. Until now, I have been calling it various things: a notion of a universe, a model of a universe, a blueprint of a universe, an idea of a universe, and so on. It may be useful to use a variety of terms to help give a sense of the idea, without allowing one to settle too much on a particular term and take it too far. However, the time for this looseness has passed, and we will henceforth use the term 'blueprint', although only after it has been carefully described to outline its own limits. Speaking in a simple and metaphorical way, we might say that God has in mind a blueprint of our universe that he uses as the basis for impressing experiences upon the satellite minds. This simple way of talking will not survive scrutiny (as will be the case for most any metaphor), so let us put it under the microscope to see where it fails and why, so that we can understand its uses and limits.

Imagine two blueprints for a house. We show these two blueprints to a builder asking which is the easiest to build, but the builder, after some examination, tells us that these blueprints are the same. And yet, when we look, one blueprint is clearly on blue paper with white markings, while the other is on white paper with black markings. What explains the remarks of this builder? It cannot be that the builder means by the word 'blueprint', blueprint tokens, since there are clearly two blueprint tokens here, and we assume he is a reasonable judge of such matters. However, it also cannot be that the builder means by the word 'blueprint', blueprint types, for there are many different blueprint types that each blueprint belongs to, and the builder certainly would not say that for every one of those types the two blueprint tokens are tokens of those types. The first token is a token of at least these two types: blue-paper-white-markings-blueprints and single-room-2m-walled-blueprints. The second blueprint is also a blueprint of the second type, but not the first. With regards to the first type, it is instead a white-paper-black-markings blueprint.

When we look at blueprints, it seems that its being a single-room-2mwalled-blueprint is salient to the question at hand, while being a blue-paperwhite-markings-blueprint is not. What is it that explains this fact that some of the blueprint types are salient to the builder's claim that the blueprints are the same, while some are not? Let the B^y -properties for a blueprint ybe the properties such that were we to build x according to y, x would have all the B^y properties. The B^y -properties pick out the salient features for determining if something conforms to the blueprint, and tells us what the building must have. When we return to the three blueprint types described above, we can see why one of the types was salient, but two were not. For these two blueprints, the very name of single-room-2m-walled-blueprint mentions some of the B-properties – being single roomed, and having walls of 2m in length. However, the name of blue-paper-white-markings-blueprint suggests properties that are not B-properties. The blueprint itself is on blue paper with white markings, but any house built to conform to the blueprint does not have to have blue paper or white markings properties. Our builder, when he says these blueprints are the same, can be understood as claiming (though he would not say this) that for our blueprints 1 and 2, the B^1 -properties are the same as the B^2 -properties.

When it comes to God, we may speak metaphorically and say that God has in mind a blueprint for our universe. Speaking as we did above, we say that for this universe blueprint U there are the B^U -properties which are such that if there were to be a physical universe that conformed to that blueprint, it would have the B^U -properties. Here we are saying that if the Physicalist is right, and that our universe is a mind-independent physical entity, then it has all the B^U -properties. On the Materialist Nouist view, there is no mind-independent universe. Rather, God has in mind the B^U -properties, and uses that as the basis for impressing experiences on us. We may speak metaphorically of a blueprint in God's mind, but what is really important are the B^U -properties, not the blueprint. Blueprints are

written down, or drawn, or encoded, in some language of communication. However, it is not as though God has in mind a blueprint written in some Godalese language. Thinking in terms of blueprints is useful in order to help pick out that which is important – the B^U -properties – but we should not suppose there is actually a blueprint in God's mind. God has in mind the B^U properties, and we speak of a blueprint as a simple metaphor without meaning to suggest there is some blueprint in some language that God has in mind.

For blueprints that a builder might use, while some thing x constructed according to the blueprint y must have all the B^y -properties to count as conforming to y, this does not entail that the B^y -properties are the only properties that x has. A blueprint for a house might describe how many walls there are and their dimensions, but not describe what colour the walls are. Two separate houses may both conform to such a blueprint even if they do not have the same colour painted walls. This differs from the blueprint we claim God has in mind: the blueprint God has in mind is exhaustive. For an ordinary blueprint, there may be questions left unanswered, but for the blueprint in God's mind there are no questions remaining. A builder following God's blueprint would not have any decisions left to make.

We have been focusing on the blueprint, but it is also important to understand how our ordinary speech will sometimes mix appearance with B-properties. For Materialist Nouism, the appearances are best understood as not being among the B-properties (the model in God's mind is a zombie world). Rather, God uses the B-properties as a basis for creating appearances – for impressing experiences upon other minds. Let us stipulate a difference between blueprints and recipes. Blueprints, we shall say, describe outcomes - we measure conformity in terms of whether or not some constructed thing x has all the relevant B-properties. Recipes, on the other hand, describe a process. They tell us to do x, then y, then z, without regard to the outcome. Of course, blueprints and recipes as we humans typically make them do not follow this neat distinction: some blueprints will include recipe-like features (e.g., a parts list), and some recipes will include blueprint-like features (e.g., a picture of the expected outcome). Nevertheless, it is useful for us to distinguish between the two cleanly. The blueprint for the universe God has in mind does not include the appearances – the ways in which the satellite minds experience it. Rather, we can understand God as also having a recipe that goes from the blueprint to the appearances. God, in a metaphorical sense, consults the blueprint, and then follows the recipe instructions in order to produce the appearances that should be impressed upon another mind. According to the universe blueprint, there is a tree which has a limb protruding to the right, and God consults the recipe given this blueprint and determines to give you the experience as of seeing a limb protruding to the right. The properties of our experiences are not among the B^U -properties, because they are properties of our experience and not of the objects of the blueprint.

Distinguishing between the appearances and the blueprint, it is sometimes ambiguous in our ordinary speech whether we are talking about the appearance or the underlying material. For example, I might say 'that car is red'. Am I here referring to B-properties, or the appearance? Sometimes, we conflate the two, and sometimes we refer to one or the other. For this Nouist view, the 'red' B-properties are loosely about things like wavelengths, impacts of such photons upon retinas, neurons firing, but not about redness in the phenomenal sense. The above has been talking purely about the Bproperties. For a full Materialist Nouist view that makes sense of ordinary conversation, we need to consider not just the B-properties on their own, nor the appearances on their own, but the two together. The redness of the car must be understood as something involving both B-properties and appearances. When the Nouist says there are trees, cars, houses, electrons, and so forth, given what we ordinarily mean by such terms we will need sometimes be very careful to understand whether we talk about the B-properties, or the appearance, or a hybrid of the two.

There is an important side question here about whether the recipe described here is something God is free to decide upon, or whether it is determined. If we suppose that experiences impressed upon minds are a means of communication, then God may not have freedom. On the other hand, it is hard to see how we could not devise an infinite number of different recipes for going from the blueprint to appearances. I wish to leave this as an open question – one in which I am inclined to think we should say God does not have freedom, but am not willing to commit myself (see discussion in section 3.3).

When we now look to see how we can explain the consistency between the utterances of the Physicalist and the Nouist, we have our answer. Speaking loosely, upon Nouism, God has in mind a blueprint for a universe. Upon Physicalism, there is a physically instantiated universe that would conform to this blueprint. The universe that the Physicalist tells us exists has all the B^U -properties that the Nouist tells us are implied by the blueprint God has in mind. There is an exact match here between the universe blueprint God has in mind, and the universe of the Physicalist. If scientists tell us that the known universe has around 10^{80} atoms, the Nouist tells us that this would be so because the blueprint in God's mind is one according to which there are 10⁸⁰ atoms in the known universe, while the Physicalist tells us that this would be so because there is a physically instantiated known universe containing around 10^{80} atoms. The deep story of these two views differs radically, but there is agreement at the higher levels, and a connection to explain the agreement. When speaking simply, the Nouist and the Physicalist both say "the known universe contains around 10⁸⁰ atoms", or "there is a tree over there with a large branch protruding to the right", or "you and I are looking at the same tree", or "the sun will rise again tomorrow", and so forth. We can make sense of the agreement here because the blueprint that the Nouist claims God has in mind matches the universe blueprint that the Physicalist tells us is instantiated. The properties of the universe that the Physicalist tells us exist match the B^U -properties that the Nouist tells us God has in mind.

With this in mind, I will henceforth talk about trees, brains, planets, humans, particles, fields, and other material objects in plain terms. Such talk should be understood to be simple talk for the above described deeper story, translated in a manner similar to that described in formulas 4.1 and 4.2 (p. 66). When I talk about the universe, I have in mind the metaphorical blueprint God has for the universe. When I talk about trees, brains, planets, humans, particles, fields, and so on, I am referring in a short hand way to features of that blueprint – things of which we can say, 'according to the blueprint which God has in mind, there are trees, brains, planets, humans, particles, fields, and so on'. Whether we take the blueprint to be metaphorical or real, this distinguishes Materialist Nouism from Berkeley's Nouism. It requires us to postulate something that is at least in part, if not whole, inaccessible to us. The appearances are distinct from the blueprint, and yet the appearances are the only thing that God transmits from himself to the satellite minds. The satellite minds have no direct access to the blueprint in God's mind, but the appearances themselves find their basis in the blueprint. If we weaken the simple rule, and allow minds to be the sources of some of their own phenomenology, in particular cognitive phenomenology, then we might want to say that the satellite minds can use the appearances to infer the blueprint in God's mind (see the end of section 7.2.1 for a brief discussion of this).

4.3 Linking Blueprints to Experiences

We have, on the Materialist Nouist view, two sides to trees, cars, atoms, brains, and so forth. There are (1) the ways they appear to us: the impressions God gives us, and (2) the way they are: features of the blueprint in God's mind. There is a link between the B^U -properties for the blueprint in God's mind, and the kind of experiences God impresses upon the satellite minds, just as on the Physicalist view there is a link between the B^U -properties of physical things and what we experience. God chooses to impress upon the satellite minds the particular phenomenology he does, because of the way the blueprint of the universe is. In terms of building a theory about reality, how do we go from the blueprint in God's mind to the phenomenal experienced by satellite minds, while avoiding sceptical worries?

I will give an example of a simplified blueprint, to show by analogy what the relationship between the universe in God's mind and the experiences impressed upon satellite minds is supposed to be like. Suppose that the

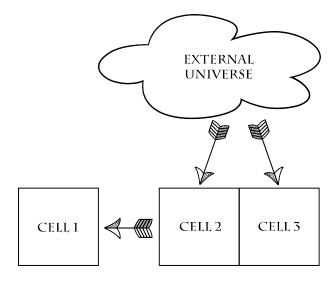


Figure 4.1: Simple three-celled system

universe God has in mind is a very simple one. We tell a story of two parts. First, of the blueprint, and second, of the recipe that takes us from the universe described in the blueprint to the experiences we have. The blueprint is of a system which has three cells, with each having two possible states, which we will label as 'on' and 'off'.

This system evolves over time. During any transition from some state t_1 to t_2 , the following happens. For cell 1, if either of cells 2 or 3 were 'on' in t_1 , then cell 1 will be on in t_2 , otherwise 'off'. For cells 2 and 3, they will each be set in t_2 to the states 'on' or 'off' randomly (where 'random' is just a way of representing further outside influences to the system that may or may not be themselves random when considering the whole universe). That's the system described by the blueprint. Now, we have the recipe. When cell 1 is 'on' (1_{on}) , we have an experience as of a blue dot, and when cell 1 is 'off' (1_{off}) , we have an experience as of a red dot, and that is it. Our experience maps to the state of cell 1, and nothing else – an experience of a blue dot stands as a symbol or sign or marker for cell 1 state 'on', and an experience of a red dot stands as a symbol or sign or marker for cell 1 state 'off', and that is all. However, the state of cell 1 itself depends on the states of cells 2 and 3 in a complicated way. Having an experience as of a blue dot is not fine-grained enough to allow us to distinguish between each of the states 2_{on}3_{on}, 2_{off}3_{on}, and 2_{on}3_{off} (assuming that we know the setup of the system). However, an experience that corresponds to cell one as being 'on', that is, an experience as of a blue dot, does indirectly map to the universe being in one of these states, because of the dependence of cell 1's state on these further states of affairs. We have an experience that varies with the state of cell 1, which itself varies depending on the states of cells 2 and 3.

This is the kind of relationship between the blueprint of a universe in God's mind, and the experiences impressed upon the satellite minds. God has an idea of what sort of universe he wants (the blueprint), and then has a recipe for going from that universe blueprint to the experiences God impresses upon the satellite minds. In the above simple system, we arbitrarily chose to have blue for cell 1 state being on, and red for cell 1 state being off. God essentially decides, "Cell 1 is 'off' so I will impress an experience of a red dot. Then I've decided that Cell 2 will be 'on', so now I'll impress an experience of a blue dot". The important things to note from the above example are twofold. First, that there is a map from blueprint to experiences. Second, that experiences may not be detailed enough to pick out just one unique blueprint. I'll go into each of these points now in some more detail.

The first thing to note is how we go from blueprints to experiences. In the above example, we made the arbitrary choice to associate blue with 'on' and red with 'off', but we could have switched things around. We can imagine this as something like a function that maps blueprints to phenomenology. We take a particular blueprint, put it into the function, and the function returns to us some phenomenology. That phenomenology is then what God impresses upon the satellite minds. Experiences, and their phenomenology, are distinct from the blueprints that served as the basis for those experiences. Since they are different, God needs a map to go from one to the other. This is the sense in which the blueprint of the universe serves as the basis for the experiences God impresses upon the satellite minds. In terms of the above function from blueprints to phenomenology, that will be treated as something like a black box. It may be that God has to make an arbitrary choice of which phenomenology results from which blueprints, or it may be that there is no choice God could make. This is an open question to which I have previously said I don't want to commit myself to an answer on yet. When we build human interfaces, we do make such arbitrary choices. We choose whether to represent files with a blue icon or a brown icon, or whether red corresponds to 'on' or 'off'. It may be, though, that when God is impressing on us experiences of the universe he has in mind, that there is just one experience God could impress upon the satellite minds given that particular state of the universe. Any other impression would mean a different underlying blueprint (or different class of blueprints).

The second thing to note is that we cannot go easily from experiences to a *specific* blueprint. While each (complete) blueprint combined with function from blueprint to phenomenology determines which experience God impresses upon a mind, it is not the case that each experience we have determines which blueprint was responsible. Modify the above example so that the state of cell 1 depends on the state of cell 2 only, or of cell 3 only, and have these cells vary in just the right way to get the same kinds of phenomenology as in the original example. These are different blueprints in

each case, but they lead to the same phenomenology. Two or more different blueprints may lead to the same phenomenology being impressed upon some mind (for example, in cases of deception). This isn't the same as saying that experiences tell us nothing about the blueprint of the universe, particularly if we think God's choice of function to map from blueprint to phenomenology is constrained. It merely commits us to the claim that we cannot necessarily determine the exact blueprint given some experience. While we cannot distinguish between the original example and the subsequent variants just described, we can say that this phenomenology is derived from a blueprint different to one which, say, just always has a state on, and nothing else. In such a case, we would have an experience of a blue dot, and nothing else, and so our experiences rule out such a blueprint.

We have here blueprint, phenomenology, and a function (recipe) mapping from blueprint to phenomenology. If we suppose that God has complete freedom regarding the mapping function, then we could just as easily include the recipe as part of what we are calling the blueprint. In doing so, the blueprint is understood to be both the blueprint described as above, as well as the kind of phenomenology that should be impressed upon a mind given the state of the blueprint. In this case, phenomenological properties like 'red' may very well be included among the B^y -properties. I think it is useful to distinguish the two: the appearances, the phenomenology, are the only things God impresses upon another mind. Earlier we distinguished between the blueprint, and the recipe God uses to determine what experiences to impress upon minds given the blueprint, and raised the question of whether God has free choice with regards to the recipe. In the above example of a simple system, certainly it seems that there is free choice when creating the interface. Again, I think this is an open question, and somewhere where the analogy to human made interfaces and underlying systems potentially breaks down. If God has complete freedom, then there is no way to infer from experience anything about the underlying blueprint that God has in mind. If God's choice is constrained, on the other hand, then experiences can tell us something about blueprints. My suspicion and hope is that the latter is true, and if it is true, then we will want to distinguish between the appearance (the recipe) and that which underlies the appearance (the blueprint). A justification of the right sort may be found by invoking something like Leibniz' Principle of Sufficient Reason: that if God has complete free choice, then there can be no reason why this experience and not some other. One possible justification of the sort that gives God a reason for making some decision over another is if the purpose of experience is (as a way of fleshing out a Materialist Nouist position, perhaps as part of a weakening of the simple rule) as a way for minds to communicate in order to have (loving) relationships with each other: different experiences suggest different universes, and if God wishes to be a reliable communicator, and one who communicates love rather than hate, then his choices of experiences to impress given the underlying blueprint are constrained.

4.4 Two Senses of Perception

For a comprehensive metaphysical view, we want to recover not just any link between the blueprint in God's mind and us. We want a view that can allow for or account for our scientific practices. Berkeley argued against the notion of 'matter' by claiming that we never truly have access to these purported material objects. All that we have access to is the appearances, and nothing else. Anything we purport to attribute to 'matter' turns out to instead be something to do with the appearances rather than the object we had hoped to describe. For Berkeley, there was no appropriate link between this stuff called 'matter' and our beliefs. This is reminiscent of similar sceptical worries relating to mathematical objects (Benacerraf 1973) or evaluative judgements (Street 2006; Kahane 2011). In each of these cases, the arguments claim that there is no link between the truth of the subject matter and our belief formation processes, and so no way to think that our beliefs are in any way reliable with respect to that subject matter. Here we examine the link between material objects, perceptions and beliefs, and minds.

The blueprint, as it is in God's mind, describes a universe full of philosophical zombies (Chalmers 1996). It is a blueprint of a universe with dolphins swimming, trees swaying, and humans going about their daily business doing things like talking, reading, eating, sleeping, getting angry and so on, but says nothing about the phenomenal. The blueprint's description of dolphins and humans is one that says nothing about the conscious life of such creatures: it is only minds that are conscious, and minds are not part of the blueprint. We might suppose God selects a particular creature to be the eyes through which some particular mind experiences the universe in God's mind. It is only at this point that there is any consciousness – it is the mind that has the experience, that experiences being that particular creature, and without that mind there is no consciousness.

The experiment in this thesis has been to see if we can provide a Nouist account that involves no phenomenology experienced by a mind that comes from that mind itself. If a mind has any conscious activity, any experience, of any sort, then that comes from another mind. For the satellite minds, it comes from God, and for God it comes from the satellite minds. This means that God subconsciously sends impressions to the satellite minds that they then consciously experience, and the satellite minds subconsciously send impressions to God that God then consciously experiences. This is not the only Nouist story, or even the only Materialist Nouist story we could tell. We could also tell one in which the minds are the immediate originators of some of their own conscious experiences. This would move such a Nouism

much closer to a Cartesian Dualist kind of mind. While I think there are merits to such views, that is not our experiment. By starting with this strict rule, we can see if there are any gaps or problems, and then carefully weaken the simple rule if and only as required.

In our experiment of not allowing minds to be the immediate originators of any of their own conscious experience, we can imagine God going on holiday from impressing experiences on the satellite minds. While on this holiday, God continues to evolve the blueprint of the universe in his mind as always. However, for the space of a few hours, God no longer sends impressions back to the satellite mind that is experiencing the world through Jack's eyes. Jack, the human, continues for those hours to live and move and breathe and read and, most significantly, to form new beliefs. After God's holiday ends, the satellite mind begins again to have experiences of the universe through the eyes of Jack, including any new beliefs Jack formed during the holiday in which there were no experiences had by that mind. During that intermission, suppose there had been a red apple placed on the table before Jack, and therefore the satellite mind had had no experience of the apple being placed before them. When God resumes impressing experiences upon Jack's mind, that mind has an experience of seeing an apple before it, but also (if he cares to reflect upon it) has an experience as of believing that the apple has been before me for a while, and that it was placed before me, of being able to remember it being placed before them, and so on, with no sense that there had been any intermission at all. Even though there had been no conscious experiences happening when the apple was placed before them or for a while after, Jack's perceptions led to the forming of beliefs, without any conscious experience of seeing that apple placed before him. Jack being a zombie for a few hours made no difference to his ability to form beliefs, and made no difference to the experience of the satellite mind once God resumed sending impressions.

Jack's story might seem strange, because we ordinarily suppose that our perception of things is quite often causally upstream from our belief formation. My phenomenal experience of *seeing* the apple is an important part of the formation of my beliefs, beliefs like 'there is a red apple before me'. However, in the case of Jack, we suppose that there was no experience of seeing a red apple, no mind that had a red-apple-seeing experience. In this case, Jack *still* forms the belief that there is a red apple before him, even though there is nothing having the experience of seeing the red apple before them. Moreover, the belief that is formed by Jack about a red apple before him during his zombie hours is the very same belief that would have been formed had God not gone on holiday (or so is the case on this thought experiment).

I have been using terms like experience, perception (with 'seeing' as a particular type of perception), and appearance in somewhat the same way. Let us focus on the word 'perception', along with some of the notions it

carries around notions of belief formation. It is my perceiving of a red apple that is, in many cases, an important part of the causal story as to why I now have the belief that there is a red apple before me. This is something I do not want to deny either. However, on the surface, it may seem that if it is possible for God to go on holiday and yet Jack to have no difficulty in forming the very same beliefs, that perceptions understood in the same way as appearances or the phenomenal have no causal role to play in belief formation.

To resolve this issue, we need to distinguish between two senses of perception: the phenomenology of perception, and the basis of perception. The phenomenology of perception is that which I have put as part of the recipe rather than the blueprint. It was the subject of the previous chapter, and is the one-way experiential side of perception. The basis of perception, however, is the story about what goes on in the physical world. It is the story that a scientist might tell us of perception: one about light reflections, retinas, neurons firing, about the brain being divided (or not) into modules, and the way in which the brain processes the inputs and uses them as part of an internal model of the external universe, and so forth. This second sense of perception, the basis sense, need say nothing about the phenomenology. When Jack lives his zombie life, the basis for perception, a neurological basis for perception (since we hypothesise that the brain is what matters), continues as it always has, and is just as involved in belief formation as it is when Jack is not a zombie. When God impresses experiences upon a mind, God uses the basis to decide which experiences to impress upon a mind.

It is true that when God takes a holiday, Jack has none of the phenomenology of perception. However, Jack still has all the same neurological bases of perception whether or not there is a satellite mind experiencing the world through Jack's eyes. Jack's brain continues to do all the same things required for belief formation, which results in the neurological basis for perception being in place and beliefs changing whether or not there is some phenomenology accompanying it. Going forward, I aim to be clear when I talk about experiences or perceptions about whether I am talking about the phenomenology or the (neurological) basis. Furthermore, when talking about 'us', 'we', and so forth, I will aim to be clear whether I talk about us in the sense of humans (qua humans), or us in the sense of satellite minds (qua minds), or sometimes simply 'we' as the whole of both of these.

The story of zombie Jack is helpful to highlight the distinction that is to be made between the phenomenology of perception and the basis of perception in the blueprint. However, it is not true to say that on the Nouism of this thesis only the basis of perception is causally upstream from belief formation, and the phenomenology of perception cannot *also* be causally upstream from the beliefs. That is to say, it may very well be that the state of the physical world if God takes a break from sending experiences is *not* the same as the state of the physical world that would follow if God does

not. The Nouism of this thesis is one involving minds subconsciously sending impressions to other minds, with those impressions having been potentially influenced on the basis of impressions sent to them. We might hypothesise that it is subconscious because we, as humans, have no recollection of doing so, though this is not a necessary feature of Materialist Nouism – it may be conscious but unremembered. God sends impressions to a mind, that mind has experiences, and then that mind subconsciously sends impressions back to God. Those impressions which that mind sends back are potentially influenced by the experiences God impressed upon that mind – influenced by the phenomenology of perception. God, having received a reply from a mind, updates the blueprint in the universe on that basis. In this way, the phenomenology of perception can also be causally upstream from the formation of beliefs. The satellite mind may be able to exert some control over Jack, and God's holiday does make a material difference.

By allowing influence from satellite minds over the blueprint in God's mind, we open new questions about causation, time, embodied action in the world, and ultimately the impact of these on science. It is to these questions that we now turn to in the next chapter.

4.5 Final Remarks

The Materialist Nouist claims that God has in mind something like a blueprint of the physical world. That blueprint serves as the basis for what experiences God impresses upon the satellite minds. The Materialist Nouist can talk of trees and rocks and other physical things, and such talk can be translated into a more precise language. Because the blueprint in God's mind is intended to mirror the universe that the Physicalist tells us exists, it is possible to translate talk between the Materialist Nouist and the Physicist and still have a great deal of agreement in the details. This is by design, and not just good fortune.

A distinction is to be drawn between the universe as described in God's blueprint, and the experiences that God impresses upon the satellite minds of it. A satellite mind has an experience as of seeing a tree, but that experience is not itself a part of the blueprint, but rather derived from it. The blueprint itself includes all the purported physical things, including brains, and as a result a mind has experiences as of, say, believing or seeing, in large part because of the way the brain is. When a satellite mind has an experience as of remembering, they have that experience because of brain states, and brain states exist as part of the blueprint inside God's mind and not the satellite mind. This might make it seem (as we saw with the thought experiment of Jack the Zombie) that satellite minds have no influence and have a purely epiphenomenal existence, but this is not so. Allowing for the phenomena of perception to have a causal impact upon the universe – upon

the blueprint in God's mind – raises new questions about how to understand causation, how much power minds have over the universe, how this impacts science, and so forth. This will be the topic of the next chapter.

Chapter 5

The Universe and Science

It may seem to some that a Materialist Nouist view is going to do damage to our ability to justify science. It might be thought that minds are not the right kinds of things to engage in science, or bodies understood as no more than B-properties in a blueprint in God's mind are not the right things, or causal influences from minds make science impossible, or a world without anything physical renders science impossible, and so forth. This chapter discusses in more detail the universe – the blueprint in God's mind – and addresses some questions around science and the ability to practice it. We will look at time, physical laws, causation (both mental and physical), before finally tying it together with a promising theory about how the brain works.

5.1 Time, Laws, and the Blueprint

Let us think about the universe, the blueprint in God's mind, and what it is like. We will avoid saying that God created the universe when speaking precisely about the Materialist Nouist ontology. Words like create, act, decide, believe, choose, will, desire, intend, and so forth, are all closely tied to notions that involve bodies, as has been touched on in previous chapters. When we talk about God 'creating' the universe, this suggests some beliefs, acts, desires, and so forth are involved in the process of how some particular blueprint becomes the one God has in mind. We are trying to be precise in the use of our terms, and all of these terms suggest something that is at least in part embodied. Nouist minds are not Cartesian minds, and are not the (sole) sources of beliefs, desires, and so forth. To avoid confusing these terms which suggest something about the physical, I aim to avoid any such terms.

There is some way in which there comes to be a blueprint in God's mind. Perhaps there is some way in which God is involved in the determination of which blueprint he has in mind, in a way that is in some libertarian sense free, or perhaps there is but one universe blueprint God could start with.

These are questions for another time. We start from the assumption that there is a blueprint in God's mind, and that there may be some constraints on what this blueprint could be, constraints that may or may not be strong enough such that there is only one blueprint that could serve as the starting point. I also say nothing about what kind of thing the blueprint is. There are possible ways to develop this story, such as describing the blueprint as being a mathematical structure, or having a mathematical structure, or something of that sort – an approach taken in the Materialist Nouist sketch of Robert Adams (2007, p. 51).

Consider the two most prevalent views of time (Markosian 2014). In the first, an A-theory or presentist view of time, there is such a thing as the absolute now, and that is all there is. Past events and objects do not exist somewhere over there. They were, and they are not now. All that exists is the present. In the second view, a B-theory or block view of time, the present is an illusion of sorts. Past, present, and future are more akin to places like here and there. Dinosaurs exist, over there, in the past. We should treat objects present and past as being as real as objects here and there. The sense or 'illusion' of time passing may then come from the instantaneous experiences had by a brain – at each moment, the brain is in a state that includes an experiential or felt sense that time is passing. No time is passing – a sense of time passing is instead just what it is like to be a brain in such and such a state. The whole universe is laid out like a block, with past, present, and future all contained within.

Consider now the kinds of blueprints for the universe God may have in mind. For a presentist view, there is a significant difference between the absolute now, and the past and future. Rather than mapping out the whole of time at once, instead the universe's history unfolds, with only the absolute now being real. One way to talk about this is by having two things: the state of the universe at a particular time (positions and momentum of particles, etc), and the rules (or laws) for evolving the universe over time. From these two components, God can calculate any later state of the universe based on the current state (setting aside concerns about true randomness or the influence of free minds).

For a block view of time, the blueprint in God's mind has the whole of time for the universe laid out from beginning to end. We may, from the block, infer something akin to the kinds of rules we might talk about within the presentist view, but it plays out differently. We could pick within the universe a moment, or a slice at some particular time, and from that describe some rules that allow us to predict the next state. If we can form some rules that allow us to pick out any arbitrary slice in the block, and then predict from that any future slice from that point (or at least, to a high degree of accuracy that may degrade the further we stray from our starting point), then we may find ourselves with laws that match the kinds of laws that would be on the presentist view. This isn't to say that there are laws, but

just that there can be a significant similarity or equivalence between these two views.

If we do not countenance the possibility of outside causal influences upon the universe, and we suppose that minds find the full explanation of their phenomenology in the physical, it will be more difficult to distinguish between a presentist and block view of time. Whether we pick a presentist or block view of time, that which plays the role of physical laws is part of the blueprint in God's mind. The laws must form part of the blueprint of a presentist universe, or the laws are given for free once you have the block. When we talk on the Materialist Nouist view about the blueprint of the physical universe, this includes the physical laws.

Physical laws are not the only way to talk about these matters. We could also describe the physical universe not in terms of laws, but in terms of powers of the physical objects in the universe. It seems to me that both ways of describing the evolution of the universe – whether laws, or powers of objects – are going to be equivalent, so long as one supposes that the physical reduces to the mental. Talk about laws can be translated to talk about powers, and vice versa, and the outcomes will be the same – in short, laws and powers will be indistinguishable. On a Physicalist view, these are not so obviously equivalent, for laws imply the existence of extra objects (laws), while powers implies the existence of extra properties. While they would be indistinguishable as well, it does change what claims a Physicalist makes about what exists. However, since we are examining a Materialist Nouist view here, I will be content to talk about laws, which seem to me an easier way to reason about such things (if for no other reason than familiarity). However, given that powers are just a different way of describing the same underlying blueprint, the following discussion could be translated into talk about powers if needed.

Thinking about laws, laws could be arbitrarily complex. They could, for example, be time dependent: one set of laws describe the evolution of the rest of the blueprint from t_1 to t_2 , and then a different set from t_2 to t_3 . It could be that every ten seconds the gravitational force is reversed for a duration of one second. There are some constraints on what laws can form part of the blueprint. On the Materialist Nouist view of this thesis, it is postulated that the universe exists, putting it crudely, as a means for transmitting information to (communicating with) other minds: indeed, impressing experiences as of being in a physical universe of some sort is the only way that minds could transmit information. Minds can only touch other minds by impressing experiences upon them, and so for one mind to be sending signals to another just is to be giving that other mind an experience. The signals from God to the satellite minds are experiences as of being in a universe like ours. A story needs to be told, another time, about why the experiences impressed by one mind upon another should be experiences of, say, a universe with stable rather than unstable or chaotic

laws, one in which the satellite minds experience being creatures (such as humans) with some capacity to learn over time, and so forth. Under a further elaborated Nouist account like this, a universe with unpredictable laws is going to transmit something different than a universe with predictable laws, and perhaps not be very conducive for transmitting information at all. Speaking simply, without attributing intention and desire and so forth to the minds (see 3.2.1 for an example discussing why beliefs cannot be interpreted as entirely body located or entirely mental located – similar considerations would apply to intentions and desires and so forth), a universe with chaotic laws may involve more noise than signal, and so is less useful as a means for transmitting information from one mind to another. The kinds of laws that can form part of the blueprint in God's mind is constrained by their implications on the purpose (whatever that may end up being) of minds transmitting signals between each other.

The laws may also be more numerous than we suppose. It could be, for example, that there are super-laws of which our universe's laws are a subset of, or entailed by, where the super-laws give (among other things) a multiverse of universes, some quite unlike our own. Suppose, for example, we consider a more fleshed out Nouism that attributes plans and desires and wishes and so forth to God (such as by weakening the simple rule; see section 7.2.1). For example, if God wishes minds and the bodies they are associated with to always be communicating, discovering, exploring, then he may have designed the blueprint so that there are ways to grow and explore without limit – potentially infinite depth.

It may sometimes be convenient to distinguish between two parts of the blueprint: the parts that evolve over time (e.g., fields or strings, particles, etc), and the parts that are about how the those parts will evolve over time (the laws). In some instances, it may be convenient to call the first not just the blueprint of the universe at a given moment, but sometimes simply 'the blueprint', and the part about how that state evolves, 'the laws' – that is, to talk about the laws and the blueprint as though the latter does not contain the former. Such talk should be understood to be a loose way of speaking, and in truth the blueprint in God's mind contains the physical laws.

When it comes to discussions about time, I will assume a presentist view. The world is more than just the blueprint of the universe. The world includes minds, and those minds are described herein as receiving impressions, updating, and impressing upon other minds. For there to be minds that impress and are impressed upon and update in response to being impressed upon, there must be an ordering of events, and the ordering of those events suggests that minds exist within something very much like time. We can talk of God impressing first an experience of a tree, and then of a rock, and then of a tree again. To make sense of this, we need something that plays a functional role very similar to time. Once we have minds operating within some time-like ordering, there is no need to postulate

a separate notion of time for the universe itself. Talk about the universe is to be translated into talk about a blueprint in God's mind, ordered updates to that blueprint, and ordered impressions upon minds. There is nothing to be gained from postulating another time-like ordering, some separate physical time. Minds exist within time, and that's enough to give us time within the universe. Furthermore, if we allow for some sort of libertarian freedom (section 6.2), then it may become essential that the whole of the blueprint not be laid out from the beginning: it becomes essential to take a presentist position. If God lacks Middle Knowledge – knowledge about what actions free creatures will take in particular circumstances (Flint 2012, pp. 42-50) (for minds, what experiences they will impress on God) – then it may not be possible for the blueprint to have taken into account what the satellite minds will impress upon God at some future time. If correct, we have good reason to favour a presentist over a block view of time. Of course, there are difficult questions here which lead philosophers to different answers. For the sake of having a position to operate from, I will assume a presentist view, but note that some think we can unite libertarian free will, a block view of time, Middle Knowledge, and so forth. A debate between these positions belongs somewhere else.

5.2 Nouist Ontology

The preceding chapters have put in place all the required components for the Materialist Nouism of this thesis. It is a very basic Nouism that may serve as a starting point that can be changed as other theoretical commitments demand. We have already considered some variations, and we will consider more in chapter 7.

We have God and the satellite minds. The satellite minds have, thus far, been postulated to have precisely the same powers as God. By keeping the powers the same, we admit to only one *type* of mind. God's uniqueness comes from his position within the relational network of minds, and not from any difference in powers (an assumption that Nouists are likely to break at a later point as part of building up a more detailed and comprehensive view, discussed in section 7.2.1). God is the hub through whom all other minds interact.

Each mind may be divided into two components. There is what we may call the Theatre of Phenomenology, which is the part of the mind that has the experiences impressed upon it from another mind. Then there is the operational part of the mind, a subconscious part which contains a blueprint, and is responsible for both updating that blueprint on the basis of impressions received and sending out impressions to other minds. The blueprint in God's mind is the blueprint of our universe, while the blueprint in each of the satellite minds is something else altogether – not an attempt to

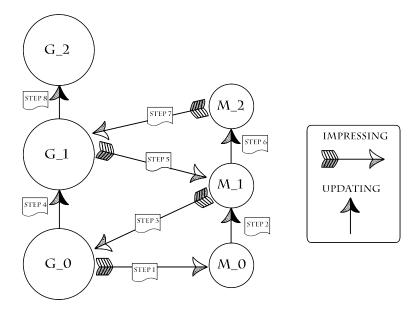


Figure 5.1: God sends impressions to a mind's Theatre of Consciousness (step 1 from G_0 to M_0), which then subconsciously updates itself (step 2 from M_0 to M_1), and then sends an impression to God's Theatre of Consciousness (step 3 from M_1 to G_0).

model the universe in God's mind, but something different, a black box that serves as the basis for the impressions sent to God by satellite minds. The satellite minds do not have experiences of the blueprint in their own minds, just as God does not have experiences of the blueprint in his mind. The blueprint in each mind serves as the basis for which experiences it impresses upon other minds.

Here I set aside questions about how God and the satellite minds get their blueprints. Some may wish to say that God has the blueprint he has essentially, or that there is some 'act' of sorts that God takes in order to get a blueprint. Whatever is said here, whether or not the satellite minds can get their blueprints in the same way is a question for a more detailed Nouist theory. Moreover, if a more detailed Nouist theory is developed, it may require a breaking of the symmetry between God's mind and the satellite minds in order to solve other problems, and therefore no longer need to postulate the existence of a blueprint in the satellite minds. These are questions for another time.

5.2.1 Mental and Physical Causation

The only causes are Mental causes. Minds receive impressions, update, and send impressions. On our picture, with God and satellite minds, God impresses an experience upon a satellite mind, that mind has the experience,

updates its internal blueprint (in response to the experience or not), and impresses an experience upon God. God has that experience, updates his own internal blueprint, and impresses experiences back upon the satellite minds (see figure 5.1). This is the *only* causation on the Materialist Nouist picture.

While Materialist Nouism allows for only mental \rightarrow mental causation, we can talk about three other kinds of causation when we translate our terms appropriately: mental \rightarrow physical, physical \rightarrow mental, and physical \rightarrow physical. We have already looked at these various kinds of causation, but it will be useful to lay them out in one place. The only true causation is mental \rightarrow mental, so other forms of causation need to be translated into talk about mental \rightarrow mental causation. This is precisely the task to which I now turn, giving an explanation of how we might find (or translate talk of) each of these kinds of causes upon a Materialist Nouist view.

$Mental \rightarrow Mental Causation$

Mental \rightarrow mental causation is the only true causation on the Materialist Nouist view, and any other causation must be understood in terms of men $tal \rightarrow mental causation$. On this particular Materialist Nouism, God and the satellite minds interact directly via impressions. We postulate as a power of minds the ability to impress phenomenology upon another. Satellite minds interact with each other indirectly, by giving impressions to God, which God then uses to update the blueprint in his mind, which therefore influences the impressions that other minds are receiving from God. We might compare this to the way some video games work. My character has a position in the universe, and I can see your character on my screen. On your computer, you move your mouse to the right. This leads to the motion being interpreted, sent to the server over the internet, which then updates its model of the game universe, and sends back new information to each of our computers informing them of the new state of your character. This then results in new images on our screen, reflecting that updated state. Similarly, a satellite mind receives an impression from God, updates its internal state including its own blueprint (a subconscious act), sends an impression back to God which leads to God updating the blueprint in his mind and sending impressions to other minds as a result.

It is in this sense that satellite minds may interact with each other, but only indirectly. Just like for this particular computer game the players cannot interact without the central server, so too satellite minds cannot interact without God. Our interactions are mediated through God. One could conceive of Nouist views that eliminate the role of God and allow each mind to interact directly, but such views are not considered here, and present advantages and challenges of their own.

This mediated interaction between satellite minds shares some similarity

with Leibniz' Monads, where they can only have interaction as mediated through God (Leibniz 1714/2012, §51):

But in simple substances the influence of one Monad upon another is only ideal, and it can have its effect only through the mediation of God, in so far as in the ideas of God any Monad rightly claims that God, in regulating the others from the beginning of things, should have regard to it. For since one created Monad cannot have any physical influence upon the inner being of another, it is only by this means that the one can be dependent upon the other.

Like the Monads, interaction or influence in some sense is only possible via God. Unlike the Monads, where their past, present, and future is already contained within them, Materialist Nouism allows for interaction in the moment, and for the story of the universe to be written and unfold over time.

$Mental \rightarrow Physical Causation$

Consider the following as one story about how much causal power satellite minds have over their bodies. Suppose, borrowing some of the tradition of Cartesian Dualism, that there is a limited part of the brain over which satellite minds have control. That is, a mind communicates to God some message for its associated body to act in a particular way, and God updates his blueprint of the universe as a result. There are, we may suppose, limits to this power, and in the tradition of Cartesian Dualism we might suppose that the place where minds have such power is a small part of the brain – an interface between our mind and God's universe. Through the influence over that small part of the brain, larger changes to the blueprint in God's mind can be made.

This is just one story that shows one way in which mental-physical causation may be understood in a Materialist Nouist framework. Ultimately such causation reduces to mental-mental causation. When a mind makes some changes to a brain (via messages to God), the causal process is as follows: the mind impresses upon God some experience, God then updates the brain part of his blueprint of the universe in response to that experience, and then God impresses upon that mind and other minds an updated experience of the universe reflecting (as appropriate) the changes to the universe, which includes those changes that are the result of some impression received by God from another satellite mind. The fundamental causal processes here are entirely mental, but we may nevertheless speak meaningfully of mental-physical causation. By mental-physical causation, we merely refer in a shorthand way to the process by which a mind may change a brain,

where the brain is a part of the blueprint in God's mind that informs the experiences God gives to the satellite minds.

Recall the simple rule from p. 40: If there's something that it's like to x, then the experience as of x'ing is an impression from another mind. This is not the only way to characterise Materialist Nouism, but it's the formulation pursued in this thesis, and one that we may want to give up (section 7.2.1). When considering views that have the mental as something fundamental, the common supposition is that acts like reasoning, deliberating, and so on, which are rooted in beliefs, all belong to the mental side of the story. And so, in order to give minds the ability to act as agents, it must be that the bases of these things exist at least in part in the satellite mind that is reasoning, deliberating, and so on, and that the results of such activities (such as deliberating) can in some instances effect change in the physical universe. This is not the only way to tell such a story. In order to have two-way causation, for satellite minds to influence the physical universe, we only need that the satellite minds be originators of changes to the blueprint in God's mind. To get that, we do not have to situate reasoning and deliberating on the mental side of the equation. We can sit the bases of those acts on the physical side, as part of the blueprint in God's mind, and specify that they are the result of activities of the body and brain. A brain has some particular neurons firing, and that is accompanied by a mind having an experience as of deliberating or reasoning. By situating those on the physical side of the story, if we want satellite minds to be the originators of changes in God's blueprint, these things can no longer be the sources because they are contained wholly within God (with satellite minds having experiences impressed upon them of things such as thinking, reasoning, etc). But this does not mean that minds cannot be the sources of changes in the blueprint in God's mind. On this story we have God impressing on us experiences, e.g., of being in pain, without God experiencing that pain himself – God can impress experiences of pain upon us without feeling pain himself. In the same way, the satellite minds impress upon God experiences, but without having an experience of doing so themselves. On this story, there's no phenomenology associated with impressing on some other mind an experience. Minds can impress upon God some experience, without having an experience themselves as of doing so. God impressing upon satellite minds experiences, and satellite minds impressing upon God experiences, are (we might say) a power of minds. There's no phenomenology associated with impressing something on God's mind, but this does not entail that the mind does nothing. It does mean that we cannot say what it's like to be a mind doing such a thing, because there is nothing that it's like to be impressing experiences upon another mind.

On this picture, satellite minds have experiences from God, and the receiving of such experiences involves an update of something in the satellite mind – perhaps a blueprint that satellite minds hold – and this then serves

as the basis for the experiences satellite minds then impress upon God. God updates the blueprint in his mind on the basis of the experiences God has, and then uses that as a basis for impressing upon satellite minds new experiences. We have two way causation.

The cost of framing matters this way is that the activities we typically associate with mental agents – deliberation, reasoning, desiring, etc – have for the most part their bases in activities of the body which is part of the blueprint in God's mind. When our Materialist Nouist divides the world into the mental and the physical (where 'the physical' refers to blueprints), things like deliberation, reasoning, desiring, fall at least partially – if not wholly – onto the physical side. A satellite mind has an experience of deliberating something, but the basis of that deliberation is in God and not the mind that is (having an experience of) deliberating. This doesn't mean the mind has no power over activities like deliberation, reasoning, and desiring: the mind may impress upon God something which leads to God impressing upon that mind an experience as of reasoning about something different than they would have were they to have impressed upon God differently. This particular way of understanding Materialist Nouism leads to the Materialist Nouist treating the brain in a way that is much closer to that of a typical Physicalist than a typical Cartesian Dualist, but still allowing for a wholly mental foundation to the world. It is a way of describing minds that has the whole of the phenomenology depending more immediately on facts about the brain than facts about the mind that is having those experiences.

Physical \rightarrow Mental Causation

We have looked above at how satellite minds might make changes to the blueprint in God's mind, and thereby have new experiences that reflect those changes. Physical \rightarrow mental works in the same way. The notion to be explained or protected here is that the physical states of the world, and changes to those states, can change a satellite mind's mental states. It is already built into the description of mental \rightarrow physical that we also have physical \rightarrow mental causation. Here is an example of physical \rightarrow mental causation: a tree is set on fire, which leads to a mind having an experience of seeing a tree set on fire. If the tree hadn't been set on fire, the mind would not have had that experience. Those impressions that this mind has are mental things, experiences that represent physical states, and depend deeply upon the physical states. Different physical states can lead to different mental states. Furthermore, such impressions that satellite minds receive may influence the kinds of impressions that such minds send back to God, and in that further sense influence God's mental states - that is, these changes to the physical do not just change which impressions a satellite mind has, but also may indirectly affect God's mental states. We have here physical \rightarrow mental causation that reduces to mental \rightarrow mental causation.

Speaking with the vulgar, when we think about physical \rightarrow mental causation, we may be concerned not with the influence of the physical over what this Materialist Nouist position calls 'mental', but rather over typically mental notions like belief, desire, thought, and so on. When we focus our attention specifically on these notions, the story is a bit different. We again distinguish between the physical bases of belief, desire, thought, and so on, and their phenomenology. The bases, it is postulated, are neurological and therefore physical. What beliefs, desires, thoughts, and so on that I have depend crucially on my physical states. The phenomenology, on the other hand, is provided in a way that depends on the neurological bases. Physical causation in the wider universe may involve reflections of light impacting on retinas, leading to changes in the neurological bases for each of these things. In that sense, physical causes lead to changes in both the neurological bases and the phenomenology of things like beliefs, desires, and thoughts. We can have physical \rightarrow mental causation of this sort as well that translates into talk of only mental causation.

Physical → Physical Causation

Physical \rightarrow physical causation has also by now been described. When describing the blueprint of the physical world as the current state, physical \rightarrow physical causation is simply the evolution of that blueprint over time according to particular laws (or powers). This ultimately reduces to something mental, since the laws of evolution over time are part of God's blueprint, and the updating of the current state according to those laws is a subconscious mental act of God's. Here we have physical \rightarrow physical causation that reduces to something entirely mental.

5.3 A Causally Open Universe

When using the term 'universe' to mean the whole of the blueprint in God's mind, as we have been, some Materialist Nouist views will involve a (causally) open universe. By (causally) open, I mean, speaking roughly, that there are influences outside the universe (understood as the whole of the physical) that can impact upon the evolution of the universe. The formulation we have been exploring, in which there is both God and the satellite minds, has allowed for satellite minds to influence the way in which the blueprint of the universe evolves. A satellite mind impresses something upon God, God updates his blueprint in part influenced by that impression, then impresses new experiences upon other minds. There might be other Nouist variants where there is just one mind (God), or where the blueprint in God's mind evolves over time in a way not at all influenced by impressions sent by other minds to God. However, the particular variant we have been considering allows for the impressions God receives from other minds

to have an impact upon the evolution of the blueprint in God's mind – in short, to influence the universe.

For a Materialist Nouist view, in a (causally) closed universe, the only thing that has any impact on how the blueprint evolves over time is the blueprint itself, which includes its laws. God updates the blueprint over time according to the laws given in the blueprint, and there is nothing else to do, no outside influence to potentially change the course of the blueprint's evolution. Some Nouist variants have open blueprints because they involve influences from satellite minds on the evolution of the blueprint, that go beyond what the blueprint itself describes. They are not, however, open merely because the satellite minds impress upon God experiences that change how the blueprint would have evolved were they to have impressed something different. If we suppose, for example, that God 'knows' at the time that the blueprint is determined what it is the satellite minds will impress on God given such and such a blueprint, such responses could be built into the blueprint. In short, the blueprint itself may be fully laid out from the start because the impressions of the satellite minds were 'known' in advance. It is simultaneously true that if the satellite minds had given different impressions then the blueprint could have evolved differently, but also that the blueprint evolves according to its own rules and nothing else, and is therefore closed. It is closed only because the actions of the satellite minds where 'known' in advance and woven into the blueprint from the beginning. Such a setup, with the influence of impressions from other minds woven into the blueprint from the very beginning, shares some similarity with Leibniz' Monads, in which Monads have no real causal power over each other, but instead have built into them everything about the rest of the universe, past, present, and future, such that there is a harmony enforced from the beginning and yet no causal influences between monads (Leibniz 1714/2012, §7 & §56):

§7 ... The Monads have no windows, through which anything could come in or go out...

§56 ... each simple substance has relations which express all the others, and, consequently, that it is a perpetual living mirror of the universe

The Nouist could suppose the same with the blueprint in God's mind, that it in some sense mirrors the satellite minds so that the blueprint, including laws, takes into account what experiences each satellite mind will impress on God before they have. Such a universe would be closed in the sense we describe above, though the laws may not be as simple as we suppose. If the Nouist does not wish to say that God's blueprint already takes into account the future impressions of satellite minds upon God, or if the Nouist wants to allow for minds to have some libertarian action without giving God Middle Knowledge, then the Nouist universe will be an open

one. Or, if the Nouist says that there is only God and yet God may lead the blueprint to evolve in a way other than what the blueprint itself describes, then the universe will also be an open one.

Suppose then we have an open universe, and specifically the variant where the impressions of satellite minds can influence the evolution of the blueprint in a way that isn't already accounted for in the blueprint's laws. For the practice of science, this may seem to be a problem when operating under the assumption that there are none but natural causes – under some sort of Methodological Naturalism (Papineau 2015). Materialist Nouism is not a Naturalist view, since it allows for the kinds of non-natural entities that Naturalism precludes, but nevertheless a Nouist may, as a practising scientist, assume naturalism for their day to day work. Suppose that Methodological Naturalism is the most prudential approach towards science. This leads to two important questions. First question is, does the open universe Materialist Nouist act in an intellectually inconsistent way by assuming naturalism in their daily work? Second, does open universe Materialist Nouism significantly negatively affect our ability to practice science?

By answering the second question about science inside an open Materialist Nouism universe, we can answer the first question about the intellectual consistency of the Materialist Nouist. If it turns out that science is not a problem given an open universe Materialist Nouism, there should be no problem with intellectual consistency for such a Nouist. We will therefore focus our efforts on the second question. When thinking about the kinds of influences that minds could have on the blueprint in God's mind, it should be clear that there is little in the basic Nouist framework that limits the extent of the impact minds could have over the blueprint. God could adjust the blueprint in response to impressions from satellite minds, anywhere from allowing only the most inconsequential changes to the blueprint, all the way up to impressions from satellite minds leading to universe scale changes, including changing the physical laws. Restrictions on the power of minds are restrictions that belong to particular variants of Nouism, and not something that is built into the basic Nouist framework itself.

First, let us formulate what the problem of an open universe to science might be. Science, we might suppose, is founded on the aforementioned idea of Methodological Naturalism, assuming that none but natural causes will be involved in our observations of the universe. By assuming as much, science proceeds by attempting to document, say, the contents of the universe and its laws, listing only natural things as part of that inventory. Why assume none but natural causes? One reason has to do with the historical success of such an approach. In most (or, some would say, all) cases where a non-natural cause has been posed (and even some that should be labelled as natural given the sense used in this thesis, such as ghosts, gods, etc, see section 5.6), further investigation has revealed more mundane causes to be at fault – natural causes. As a matter of practical success, science

can be advanced further by seeing purported non-natural causes as a sign that some poorly understood natural causes are at work, rather than allowing non-natural causes into our inventory of the contents and laws of the universe. Quite apart from the practical success of the approach, we also have a pragmatic one. If there are true non-natural causes, then there is a serious question about their accessibility. The bases of perception and observation, thought, belief, reasoning, and so forth, all skills needed as a scientist, are natural bases. When attempting to engage in science, there is an important question about how it is that the non-natural causes might be accessed by these physical bases – by humans – in a way that allows the kind of repeated investigation and experimentation required by science. As a pragmatic point, non-natural causes are potentially inaccessible to science in the repeatable way that is needed.

Let us consider ways in which an open Nouist universe might present a problem for each of these points about the practical success, and pragmatic value, of Methodological Naturalism. Suppose that the Nouist influence was large enough, such that minds could and did regularly steer the evolution of the blueprint in different observable ways. Spontaneous creation of new life, stars spinning out of control in the sky, cities turning into mountains, and so on. In such a world, Methodological Naturalism would not share the practical success it does in our world. This therefore is a simple argument against the kind of Nouism that permits such large scale changes. The simple response of the Nouist to such a charge is that the influences of minds are much smaller, a point to which we will return soon. With regards to the question of pragmatic accessibility, here the Nouist may agree that such outside causes are inaccessible, but also point out that it does not matter. God and the satellite minds are not claimed to be targets of scientific investigation, and are therefore not purported to be accessible through science. Again, no threat to science as science is intended to be used.

Another objection grounded in the pragmatic ability to practice science may be that in an open Nouist universe, science is doomed to failure as an attempt to given a complete inventory of the contents and laws of the universe. Such an objection would be a strange one, because there is no guarantee that the universe is amicable towards our attempts to pry its depths and document them. A similar argument is sometimes offered against Physicalist views, in the context of an argument of the merits of theism over atheism (Plantinga 2012; Reppert 2003). In such an argument, a claim is made that science finds its best grounding in a theistic position. Only by assuming theism do we have grounds to think that the universe is going to be friendly towards our interrogation, because only on theism do we have reason to think that the universe is partially or wholly made for or aimed at us. On atheism, it would be a surprising miracle that the universe would be able to be understood by creatures like us. On an atheistic framework, it seems more likely that there are fundamental limits to the ability of any

creature to understand the universe, such that the end of science is closed to us. Such an argument bears some similarity to the charge made against the open universe Nouist here, and the reply in either case is the same: the universe may very well be closed to us in some respect, but we just do the best we can. It is a very strange argument to level against a theory to say that if it's true, the end of science is fundamentally unachievable. Our theories are an attempt to explain what the universe, and indeed the world, are like. Our theories must be slaves to the way the universe is, not the other way around. If science is unable to reach its end, that is unfortunate, but no objection against the truth. Furthermore, just because the end of science may be closed to us, this does not mean that we have no way to understand anything of the universe given scientific investigation. Just because science cannot tell us everything about the universe, does not mean it is without value. It has limits, but is not empty of all value.

Limits to science are also something that we are already comfortable with, and are not automatically black marks against Physicalism or open Nouism. Humans, with their two eyes and ears, brains with limited capacity, emotional influences, and so forth, are not perfect investigators. Sometimes we see things differently to each other, record things incorrectly, make up things, and so on. Science as a human enterprise is littered with weak and limited humans regularly making mistakes. Moreover, if we think about the end of science, a complete inventory of the contents and laws of the universe, we will likewise recall that we have already accepted that the end cataloguing goal of science is impossible. The amount of things there are in the universe to record is beyond even our theoretical capacity to record. Any medium of record keeping will itself be something inside the universe, and so must be included in the catalogue – included in itself. Science, as an enterprise, is limited already, but we do not let that stop us from trying as best we can and obtaining great value from it.

Let us return briefly to the claim that satellite minds can exert causal influence from outside the universe, but such influences are small. Allowing such influences is not a new idea, either in philosophy or in science. In philosophy, Cartesian Dualists have long claimed that such causal influences regularly occur. The Nouist here is not postulating something new in this respect, so discussions around the impact of Cartesian Dualism on science should apply (for the most part) to discussions about Nouism. In terms of the causal influence, the Cartesian Dualist and typical Nouist will likely postulate no greater causal influence than one over individual humans, and specifically, over parts of their brain. It may not take very much outside causal influence to have large impacts upon a human body. Thinking of our own computers, something as simple as an on/off switch on a computer can make large scale (relative to the size of the original change) to the universe – click a button on a computer and the fans turn up or down, click another and the DVD drive ejects. The Cartesian Dualist and Nouist need postulate

no more than very small causal influences. When it comes to the scientist doing their job, such outside causal influences will be effectively invisible. They will not occur in places that scientists typically measure, and are not something that scientists need to worry about.

Many philosophers and scientists also allow for something that is functionally equivalent to outside influences in the universe, in the form of true randomness at the quantum level. For such quantum effects, there are events that occur that lack a full explanation when considering the blueprint of the universe alone. A particle may land here or there, with a probability of half of each outcome, and in fact it landed here. There is a story about which ways it may land and the probabilities, but there is no explanation for why ultimately it landed here and not there (though this is a controversial claim, with some such as Alexander Pruss (2006) arguing we can have adequate explanations). While such events are different from outside causal influences, there is an important similarity: there are events that do not have an explanation that is wholly given by the blueprint of the universe – there are explanatory gaps when one's attention is focused on the blueprint alone. For my part, I think it is a mistake to allow for any notion of true randomness in the universe, and there are good reasons to think that we do not have to give up determinism (Albert and Galchen 2009; Maudlin 2014; Wiseman and Cavalcanti 2017). However, for those who already allow for such indeterminism, the indeterminism of Nouist minds has a similar standing.

Let us consider briefly a final difficulty with the practice of science. When we practice science, we like to assume the universe is closed. However, in practice, it is very difficult to isolate only the parts of the universe we want to investigate. For example, to avoid contamination with other particles, scientists will sometimes test underground where the surface of the earth can soak up the noise to leave us only with the signal. Or the measuring equipment itself can influence the outcome of the experiment, most famously seen in quantum experiments. Contamination from outside of an experiment is a common problem in science to be worked around. While on some Physicalist views the universe is closed in theory, it is open in practice when we actually do science. In short, openness to outside causal influences is something that needs to be dealt with in the practice of science whether or not one's ultimate theory claims the universe is causally closed.

The short story of all the above is that, yes, an open Materialist Nouist universe may present some challenge for science, but the scale of the challenge is small, manageable, no larger than other problems we already deal with and accept, and at any rate no objection to Nouism. If the problem is small and manageable, then the Materialist Nouist has no problem with intellectual consistency. Such a Nouist has reason to expect and does expect that science will be possible, or at least practically no more difficult than expected by the Physicalist, and perhaps easier in respect to expecting that

the universe will be more amicable to the investigations of humans.

5.4 Science

5.4.1 Science and the Blueprint

My aim now is to provide a sketch of how the practice of science may be warranted upon a Materialist Nouist view despite Berkeley's sceptical worry that we cannot attribute anything to purported material objects. Some perceptive readers will now have realised there is no problem to finding an appropriate connection between the objects in the physical universe and the kinds of beliefs and perceptions we have. The Materialist Nouist of the sort we are considering places suns, planets, apples, trees, human bodies, and brains, all within God's blueprint. Furthermore, the kinds of beliefs I seem to have and the kinds of perceptions I have are all determined by God on the basis of the blueprint in his mind. In short, the organ (the brain) that serves as the basis of things like perception and belief is contained (speaking loosely) side by side with the things those beliefs and perceptions are supposed to be about – all within the blueprint, with causal connections between them. Contrary to the typical Cartesian Dualist, a lot more of our phenomenology (all, on this experiment) finds its basis in features of the blueprint God has in mind, and not with the mind that is experiencing that phenomenology. That's the short story, but I will give a longer version of it, to hopefully make these points especially clear. In many respects, the account of the mental to be found here has a lot more in common with typical Physicalist predictions than it does with typical Cartesian Dualist predictions.

The kind of link that I have put forward so far is one between the experiences satellite minds have, and only specific subsets of the universe: specifically, the brain. Satellite minds have experiences of the universe that are as they are because brain states in God's blueprint are as they are. The blueprint of the universe in God's mind includes brains, and God uses those brain states as the basis for which experiences to impress upon satellite minds. Brain states themselves are as they are because of the states of wider parts of the universe, or because of impressions received from God that led to God updating the blueprint in a way that changed brain states. Just like the simple blueprint described earlier had one cell as the direct basis for experience, but was itself influenced by the state of other cells, brains are the direct basis for the experiences satellite minds have, but are themselves influenced by the wider universe (figure 4.1 on p. 72). Here's one short story of perception. There is a satellite mind, a brain, and the wider (blueprint of the) universe. The blueprint in God's mind is of a universe that evolves over time: light is emitted from the sun, some of which is reflected by the surface of the apple, and some of which impacts upon a retina. This leads to neurons firing in the brain, and the state of the brain changing (more on that in a moment) to be in a seeing-an-apple state. God, on the basis of such a brain state gives the satellite mind an experience as of seeing an apple.

In the case of deception, where there is a hologram of an apple rather than an actual apple, similar types of photons reach the retina, leading to similar seeing-an-apple brain states, leading to similar experiences impressed on that satellite mind as of seeing apples. Because it is the brain states alone that are the basis of the phenomenology of perception, and not the states of the external universe, deception in this sense is possible. Just as in the example of the simple blueprint above, where either of cells 2 or 3 being on would result in seeing a blue dot, God gives a satellite mind an experience as of seeing an apple not because there is an apple present, but rather because the brain is in a seeing-an-apple state, which can arise in two or more ways, some of which are deceptive.

We have in this case a direct causal link from the external universe of apples and trees, through to the brain, through then to the experiences satellite minds have impressed upon them by God. We have a story then, not just about God impressing upon minds experiences based on states of the physical universe, but specifically based upon states that are themselves influenced by the objects that the experiences purport to be about. We have a causal link from apples and trees all the way to phenomenal states of seeing apples and trees. While this story may or may not be correct, it is at least *possible* on a Materialist Nouist account to have a link between apples as material objects and the experiences of seeing apples.

The result of all these considerations is that the satellite minds of the Nouist do not have any more direct access to apples than is true of minded things on a Physicalist view, and thus is no better at answering Berkeley's sceptical challenge. There are only phenomenal states which are mapped to physical states (brain states specifically, the neurological basis of perception) that themselves may or may not have been causally influenced by the presence of apples. This gives us a link to allow for at least the possibility that there is an appropriate relationship between apples as material objects in the universe and both our beliefs that there is an apple before us, and our experiences as of seeing an apple before us, without having any direct contact with the wider universe.

5.4.2 Science and the Brain

What we want next is a theory that not only links apples to phenomena, but that gives us a universe where humans can learn and discover and improve their understanding. Recall that Berkeley's challenge was that we cannot know anything about the purported material objects themselves as they are in themselves. We need more than just a link of any sort: we need a deep link that puts the brain in states that are significantly and reliably dependent on the external universe. Despite the great gulf between scientific descriptions of the universe and experiences, there does seem to us to be a relation between the blueprint and the experience: even though apples can appear to have smooth unbroken surfaces despite being composed of mostly empty space, we are able (it seems to us) to pick up apples, eat them, move them across the table, throw them, and not be surprised at the ways in which they behave. In short, we are able to make predictions about the kinds of experiences that will follow particular actions. Supposing that humans are indeed able to make predictions, there must be a reliable link between sequences of experiences and sequences of physical state changes. Specifically, between changes in the blueprint's apple and the apple of my experience. This, in turn, becomes a story about a reliable link between the external universe and the neurological bases of perception and belief.

For the brain to do the kind of work we are after – to be a somewhat reliable witness of and actor in the external universe – it would be good if it were able to form a model of the universe. One popular view of the brain treats it as being similar to a deep learning machine (Rescorla 2015), though perhaps a very crude copy. Neural networks attempt to mimic the way that we think the brain works – neurons with dendrites that take inputs, and axons that give outputs. Neural networks can be built to arbitrary depths (so long as we have sufficient computing resources), and can be trained to do advanced tasks like identifying objects in images, driving a car along a road, and so on. In the language used in the field of machine learning, a trained neural network will be called a model, and its outputs are aptly called hypotheses. For example, a neural network might be trained to recognise cats, dogs, and horses in images. After being trained and given some input image, it can output predictions about whether or not the image contains each of a dog, cat, and horse.

If the brain works in a similar way to neural networks, then we can think of the brain as being an isolated machine, with inputs and outputs. The inputs may be from various senses connected to the brain, passing electrical signals in. The outputs may be from similar electrical signals passed out to the body, which can then result in actions like lifting an arm or moving lips. From the inputs, the brain continually trains and updates models which produce what we could call hypotheses. Based in part on those inputs and its trained model, the brain generates the appropriate outputs that result in actions.

When it comes to experiences, say, of seeing an apple, there is no direct link between the inputs from the external universe and experiences – it is not the very photons hitting the retina that are the basis for an experience of seeing an apple. Consider Figure 5.2, as a fictional story about the brain (that is, I do not suggest that the brain is in fact divided into modules like those that are displayed here). We have light emitted from the sun, striking

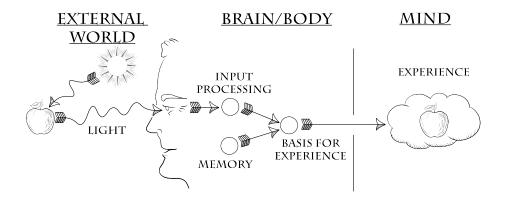


Figure 5.2: Brain and Experience

the surface of the apple, some of which is reflected and hits the retina. This results in signals firing, and going to a (hypothetical) input processing module. Some processing is done, perhaps by feeding the inputs into some neural network, with some of those outputs being sent to a separate module which I call the 'basis for experience'. Here, on a hypothetical Materialist Nouist framework, is the specific part of the brain that God uses as the basis for giving minds experiences of the universe. A satellite mind experiences seeing an apple because of light reflected from the apple hitting the retina, being fed into a neural network which produces outputs that are then fed to another module, which then serves as the basis for experience.

This is just one story of how experiences may have a basis in the physical universe, and produce experiences as of seeing apples when apples are indeed present. Other stories are possible. These include stories in which God uses the whole brain as the basis for experience, or even brain plus body, or even brain plus body plus some of the wider universe. Latter views, where the basis for experience is more than just the brain, might align with externalist views of mental content (Lau and Deutsch 2014). I prefer myself a more internal view, where nothing more than the brain is needed, and perhaps even less. Prediction Error Minimization (PEM) is a specific account of the brain as a machine learning style neural network that takes this more internal view (Hohwy 2016, p. 259):

PEM should make us resist conceptions of [the mind world] relation on which the mind is in some fundamental way open or porous to the world, or on which it is in some strong sense embodied, extended or enactive. Instead, PEM reveals the mind to be inferentially secluded from the world, it seems to be more neurocentrically skull-bound than embodied or extended

This is a view of the world wherein the only way that the brain, or

more specifically the operations of the brain, can learn about the external universe is through the various inputs to the system. There is no other way for the brain (or the mind) to reach into the world and check whether its hypotheses, inferred from the various inputs, in fact match the way the world is (Hohwy 2016, p. 262):

In an ideal but impossible design, perception, attention and action would require the brain to simultaneously access both the internal estimates and the true states of affairs in the world. This would allow it to compare the representation and the represented, the attended and what is worth attending to, action planning and what is acted upon. Philosophers have long recognized that there is no such access since we never have unfettered knowledge of states of affairs in the world. PEM delivers the tools for circumventing this problem: it gives the brain access to two things it can compare, namely the predicted and the actual input. Moreover, the divergence between these two is harnessed in a bound that can be minimized in inference, in a way guaranteed (modulo malfunction and skepticism) to approximate the true states of affairs.

As mentioned, there is mounting empirical and modeling evidence in favor of PEM; it is also attractive because of its ability to unify very diverse approaches to cognition. Philosophically speaking it is attractive, as I mentioned, because it provides a clear way to circumvent the problem that we represent, attend to, and act on the world, yet have no unfettered, independent access that would guide these processes. No other account of cognition comes close to deliver as compellingly and comprehensively as PEM. This alone is enough to take PEM seriously.

The Materialist Nouist can avail themselves of theories like these, that treat the brain as being a neural network that operates in a similar manner to human designed neural networks, and are able to 'learn' about the external universe despite no direct access. Of course, many proponents of theories like these will want to treat the *mind* as resulting (in some sense) from the brain in a way that the Materialist Nouist rejects. But that does not prevent a great deal of the account about the brain from being transferable to a Materialist Nouist framework.

We are in a position to give the start of an answer to Berkeley's sceptical worry. As quoted in Chapter 17, Berkeley explains the challenge as so (§86):

And first as to ideas or unthinking things, our knowledge of these has been very much obscured and confounded, and we have been led into very dangerous errors, by supposing a twofold existence of the objects of sense, the one *intelligible*, or in the mind, the other *real* and without the mind: whereby unthinking things are thought to have a natural subsistence of their own, distinct from being perceived by spirits. This which, if I mistake not, has been shown to be a most groundless and absurd notion, is the very root of *scepticism*; for so long as men thought that real things subsisted without the mind, and that their knowledge was only so far forth *real* as it was conformable to *real things*, it follows, they could not be certain that they had any real knowledge at all. For how can it be known that the things which are perceived, are conformable to those which are not perceived, or exist without the mind?

The challenge is to explain how it is that we can claim to have knowledge of the purported real things, when we only have our perceptions and cannot in any way perceive the purported real things. Our perceptions are not the things themselves, and (as Berkeley) argued, anything we claim to know about the things themselves we find is actually something about our perceptions. The Materialist Nouist can now address this challenge. Recall in section 3.2.1 and elsewhere we have considered a view in which the foundation of beliefs is contained within the blueprint in God's mind, and not within the satellite minds. Beliefs are explainable primarily in terms of facts about the physical universe – about the blueprint. Beliefs – knowledge – sit within the blueprint close to the objects that those beliefs are supposed to be about. Speaking of material objects only, sunlight hits upon the surface of an apple, photons are emitted some of which hit retinas, neurons fire, and brain states form the foundations of beliefs. These are all together as part of the blueprint in God's mind, and there is a direct causal link between the material objects and the foundations of beliefs. Contrary to Berkeley, it is not that the seat of belief has access to experiences only and not material objects, but rather that the seat of belief (the brain) has access to material objects only and not experiences. Minds have experiences, brains do not. There is then no mystery remaining as to how it is that humans might come to have real knowledge of material objects. There are not minds that are drawing inferences about the physical based on the qualia of experiences (or in Berkeley's case, drawing inferences about the ways in which experiences are related on the basis of experiences impressed upon us), but rather there are brains drawing inferences about the rest of the universe on the basis of inputs, outputs, and updating over time, and minds having experiences on the basis of those brain states. Berkeley's challenge is only a concern for the Nouist or Dualist that wants a more Cartesian mind, a mind that draws inferences about the physical universe based on the qualia of experience.

5.4.3 Science and Memory

With a Materialist Nouism that sticks to the simple rule (p. 40), there is an additional layer of difficulty we need to account for in our practice of science that the Cartesian Dualist does not, one that is ultimately resolved by having an organ like the brain: memory. Suppose that I have an experience as of seeing a man standing over a body, bloodied knife in hand. Later on, when I'm talking to the police, I have an experience as of remembering seeing a man standing over a body, bloodied knife in hand. On the way I have talked about these matters so far, minds have no access to the original experience. God impresses upon minds an experience as of remembering, and does so on the basis of the neurological state of the brain at the time of the remembering rather than at the time of the event occurring. My brain could be in that state because there was actually a time where I was appropriately positioned and there was a man standing over a body, bloodied knife in hand. However, my brain could also be in that state because God created the universe starting at that moment, or because I'm a brain in a vat being manipulated into experiencing remembering things that never happened, and so on. The important point is that when following the simple rule the *mind* itself does not store memories – the act of 'remembering' something involving changes to brain states and God then impressing upon us an experience as of remembering.

Experiences are instantaneous, and we (qua mind or human) do not have direct access to those earlier experiences. What we have are *memories*, which include the what-it's-like to recall something, and those memories are as they are because of the states our brains are in *now*, which God uses as a basis for impressing upon us an experience of remembering something. Suppose now that we insist on the following as a claim about the universe: human memories are somewhat reliable. That is to say, enough of the time when we have an experience as of remembering something, there really was a moment where we experienced something of that sort. The details may be lost – the fidelity, so to speak, of the memory pales in comparison to how the experience was when I saw the man with the bloodied knife. But when I recall the general story, that I saw a man over a body, bloodied knife in hand, this is, in most instances, reliable – there really was a time when I saw a man over a body, bloodied knife in hand.

For it to be the case that our human memories are somewhat reliable, it would require that there be a truth tracking link between the neurological basis of some perception in the past, and the neurological basis for the memory of that perception. I remember having had a perception of seeing the man with a bloodied knife, and that's because I did (in most cases) indeed have a perception of seeing a man with a bloodied knife. I have given such a link above, one involving the sun, apples, photons reflected, brains forming hypotheses, and experiences being had. When it comes to

remembering, we might imagine (under one story) that the memory is stored in the memory module in our brain, having been formed by data that comes to it from the various inputs to the brain and the processing performed subsequently. It may be that a memory module would rely on other parts of the brain to simulate the recalled experience, filling in gaps as it goes. This simulated memory would form a similar basis of perception as the original basis of occurrent perception did.

What we have here is a story that allows for the possibility of truth tracking regarding both experiences as of seeing and experiences as of remembering seeing, and the physical objects out in the universe. There is input into the body via the eye (and other senses) that is causally connected to the objects in the universe, and these inputs are involved both in the formation of vision as well as memory. Whether we have an experience as of seeing such and such, or remembering seeing such and such, both of these are causally connected to the original event of light impacting on the retina. There is a possibility of truth tracking.

This general reliability is required for science. We need it to be the case that we can make observations on Monday, and remember them on Tuesday. Without memory (which could also come in the form of textbooks or notebooks), or at least without the neurological basis of memory, with only the immediate now being impressed upon us by God, science is not possible. Materialist Nouism (in the same way as Physicalism) can give us the right kinds of memories by postulating that our memories depend on brains that are themselves responsible for interpreting inputs and storing memories and performing other useful functions, and are reasonably reliable at doing these things. Science, as a discovery of the universe, is possible.

5.5 Deception

With the greater components of this particular Materialist Nouist view in place, we can take a step back and briefly examine the role of deception. Deception has been touched upon briefly already, but it is important that we set aside concerns about the possibility of occasional or rampant deception. Here I will briefly consider two ways in which problematic deception might be thought to find its home in Materialist Nouism, and why I think it is no real problem after all.

First and foremost, we might wonder if it is possible for God to deceive us about the nature of the blueprint. That is to say, God has in mind a blueprint of a universe A, but deceives us by giving us impressions of a universe B. This is the most straightforward kind of deception. It turns out though that such deception is not possible. Consider what it would take for God to give impressions of a universe B. God would first have to have in mind a blueprint of universe B, and then use that blueprint as the basis

of which impressions to give the satellite minds. But this is just what has been said it takes for a universe to be actual. There would be no deception – universe B would be the actual universe. There is no sense to be made of the claim that the universe A is the actual, and yet the blueprint of universe B is the one that God uses as the basis for impressing upon the satellite minds. Straightforward deception of this sort is not possible.

Here is another avenue where it might be thought deception of a serious sort could enter. The blueprint of the universe as described is a blueprint of the sort of universe that the Physicalist believes in, where the Physicalist believes in a mind-independent physical universe. Is God then not deceiving the satellite minds by giving them impressions as of a mind-independent physical world? This particular objection, while it would be serious, is not an objection against this Materialist Nouism. It is not that God has in mind a blueprint of a *mind-independent* universe, but rather just of a universe. When the Materialist Nouist says it is a blueprint of a universe matching the universe of the Physicalist, it is meant with regards to, say, the structure of that universe, and not with regards to its place in a broader metaphysics. Moreover, the experiences that God impresses upon satellite minds are (as has been postulated thus far) on the basis of brain states. Whether or not those impressions convey with them the sense that the universe is mindindependent will depend on facts about brains. Thinking from the perspective of a human, it is not universally true to say that humans experience themselves as being in a mind-independent universe. Some humans will look around and have impressions as of a mind-independent universe, and some will not. Which way this falls will depend (for example) on facts about the ways in which particular brains are wired. In short, we may say that it is us humans imputing more into our experiences than is warranted by them. Speaking in the vulgar, we are not required by our experiences to think that the universe is mind-independent – that is a conclusion or hypothesis that goes beyond the evidence. This point was highlighted at the outset (section 1.1):

This may seem at odds with our initial reaction, that of course there exist material things independent of minds. Examples are abundant and plain to see – trees, rocks, cars, and so on. As compelling as it may sound, this initial reaction is misplaced. Following a line of reasoning that mirrors Descartes' sceptical argument in the First Meditation (Descartes 1641/1996), might there not be the appearance of a world of trees, rocks, cars, and so on, without such a world existing independent of any mind? The world appears to be a certain way, and that appearance is what we need to explain. It is a further claim that goes beyond the evidence to say that there is indeed a mind independent physical world behind the appearances, a physical world whose

structure is appropriately related to the way it appears to us to be

Quite apart from these considerations, the Materialist Nouist might address concerns about deception another way. We have considered a Materialist Nouism that is distinctly non-Cartesian, with desires and beliefs sitting within the blueprint within God's mind. When it comes to considering deception, what is it that is being deceived? Deception, as we normally use the word, more appropriately belongs within the blueprint – we talk about humans within the blueprint being deceived, not minds outside the blueprint. And we already grant that deception is a common occurrence for humans. Brains operate on incomplete information, and mistakes of judgement are inevitable. It is only when we consider deception with regards to the satellite minds that we see it is difficult to form such an objection, and for as much sense as we can make of satellite minds themselves being deceived, it seems no deception of a serious sort is possible. Deception in terms of humans within the blueprint, forming incorrect judgements about the universe, are both possible and well documented, and have been discussed previously. Deception in terms of a breakdown between the blueprint in God's mind and the impression given to satellite minds is not possible. Any such deception would require a blueprint to serve as the basis for the 'deception', and that blueprint would then just be the actual universe.

5.6 Ghosts and Gods

While many Physicalists reject the existence of things like ghosts, psychic powers, and so forth, such rejections are understood by some Physicalists as being just a matter of fact about the way the world is, and not something that is inherently at odds with Physicalism. Suppose that humans did in fact possess psychic powers. We would be able to examine these powers: their ranges, limits, capacities, regularities, and so on. Supposed psychic and other powers that were once called 'supernatural' would, under scientific investigation, eventually be considered part of the physical world. Entities like Casper and Zeus are physical postulates, to the same degree that humans are. Ghosts and gods involve locations within space-time: Casper is on Earth and not on Mars, and has a wispy form. Zeus rules the skies, but not the underworld, and was created by the Titans. Setting aside the experiential side of Casper and Zeus, we can think of the kinds of blueprint descriptions we would give to describe them. For Zeus, we might describe the details of the powers he has to rule thunder and lightning, to speak, and so on. For Casper, we describe his ability to pass through walls, to see only the immediate surrounding area, to have memories associated with an earlier human, and so on. And if we had access to Casper and Zeus, then we could start to investigate them through our ordinary scientific methods.

These would be physical entities, at least insofar as humans are physical entities. The Dualist or Nouist needs to do more than to defend stories like these to show the falsity of Physicalism. Even if it turned out that Near Death Experiences were as they are sometimes reported to be, Physicalism still would not be falsified. It would certainly falsify a more specific Physicalist thesis held by many Physicalists, but it wouldn't settle that debate I am interested in – that debate that has its strongest representation in problems of hard consciousness. Heaven and hell can be a part of a blueprint just as much as the Earth and its solar system. Showing these things exist is not sufficient to show Physicalism false. Certainly, it is evidence in favour of other hypotheses, but it doesn't guarantee Physicalism's falsity. There are interesting discussions to be had about what views would and would not be falsified (or made untenable) by such discoveries. However, when 'physical' is understood as I have outlined in this paper, we cannot settle the debate between Physicalists, Dualists, and Nouists by simply pointing to the existence of ESP, ghosts, gods¹, or even Heaven and Hell. All of these things are able to be described by blueprints, at least as much as humans are, and can be considered physical postulates.

5.7 Final Remarks

This chapter has brought together some of the important groundwork laid in preceding chapter. I have described in greater detail how the different kinds of causation play out in a Materialist Nouist framework, how the universe can be understood, and then importantly how we exist within it. The Materialist Nouist of the sort I have put forward is comfortable attributing a great deal more to the brain and the physical universe (a blueprint in God's mind) than the typical Cartesian Dualist. In doing so, this puts the Materialist Nouist in much closer agreement with the typical Physicalist, perhaps even with the Identity Physicalist, than might be expected. Phenomenology, including cognitive phenomenology, depend deeply on brain states.

In the next chapter, I turn to some secondary topics, questions of interest that arise from having the basic groundwork in place: how we are to understand the self, and how this might relate to notions of freedom and morality.

¹That is, gods like Zeus

Chapter 6

The Self, Liberty, and Morality

The self, as we tend to use the term, is taken to be some persisting thing around which to attach notions relating to ownership, responsibility, the afterlife (or lack thereof), and more. Crucial to the notion of the self is that there is some same thing that persists over time, so that we can say at some later time that it is the same self as was present at some earlier time. The one who was charged with murder is the same as the one who committed murder, the one who owns the car is the same as the one who bought it, and the one who enters the pearly gates is the same as the one was a follower of Jesus before their death. Is there any perfect deserver of the name 'self' in this Materialist Nouism? A perfect deserver, that satisfies our folk notions of 'self' (Lewis 1995), we might suppose, would need to be a single thing that persists over time, and is both the thing that perceives and the thing that acts. An imperfect deserver might be two or more things that when taken together give us what we expect from a self. When using the term 'I', does 'I' refer to anything, to any kind of self? The Cartesian Dualist typically thinks that there is a deserver of the name 'self', and that 'I' statements refer to this. For this Dualist, there are two candidates to look to for a notion of self: the body, and the mind. Two candidates would be a less than perfect deserver of the title, and so there is some motivation to choose just one of these things as being the true self. For Cartesian Dualists, there are persisting minds (or souls) that are distinct from the body, may survive the death of the body, and in virtue of their persistence over time can answer to some of our intuitions about the self (Moreland and Craig 2003, p. 232; Robinson 2016). A good characterisation of a Cartesian Dualist position that treats the soul as the central point around which to understand personhood, identity, and self is as follows (Moreland and Craig 2003, p. 291):

I am essentially my soul – same soul, same person; different soul,

different person – and it is because my soul exists, owns my mental life, diffuses my body and persists through change, that personal identity has a foundation. Personal identity is grounded in the soul for many advocates of the absolutist view. Thus, upon analysis, the first-person point of view turns out to be grounded in a first-person viewing kind of point – a substantially self-conscious ego.

Endurance over time – the existence of something that can be identified in both earlier and later moments – is of central importance to having a notion of self that can fill the kinds of roles we want a self to play. A mind of this sort, then, at a first pass, looks like a good candidate for matching some of our intuitions. However, such a notion of the self does not match our intuitions in other ways, and we'll discuss some of these soon. The Materialist Nouist of the sort looked at in this thesis has similar candidates for the self. Such a Nouist could similarly point towards human bodies, or could point towards minds, as candidates for the self. Just like the Cartesian Dualist, Nouist minds can have a similar kind of permanence over time, an invariance to match our intuitions about the persistence of the self over time. However, just like the Cartesian Dualist, there are claims about the self that are difficult to attribute solely to a mind of this sort.

For the Physicalist, there is, I (and others who claim a no-self view) suspect, no candidate with the kind of persistence over time that we would want, though such a claim is certainly controversial. When our attention is only on the physical, I am aware of nothing that we can point to that is always going to persist over time in a way that provides a solid foundation for our understanding of the self. We might decide to pick out a particular cluster of atoms as the important thing to persevere, or physically-based psychological continuity over time (Nichols and Bruno 2010; Olson 2015), or some other physically based marker. However, for any physical markers we pick, we can (I suspect) derive counterexamples where there will be a break in the proposed chain, yet the intuitions for some will say that it is the same self (or, conversely, where there is no break in the proposed chain and yet it is not the same self over time). We cannot pick out something like 'organism' either, because this is a term of our convenience, and I suspect any attempts to be precise with what we mean by 'organism' will lead to counterexamples. Of course, our intuitions about the self are hardly universal, which also adds difficulty to any proposed candidate for the self: for example, when reflecting on a thought experiment involving using a teleporter that destroys the body at one end and rebuilds at the other, some will say that the one that enters is the same self that exits at the other end, while others will say that it is not. Finding an appropriate physical marker is difficult both because of inconsistency in beliefs and intuitions of individuals, and inconsistency of beliefs and intuitions between individuals (see Bernard Williams (1970) for an example of inconsistency, and yet not all share the intuitions that Williams tries to tug at).

None of this is an objection against Physicalism. If our folk notions around self do not survive facts about the world, so be it. Our notions of self have arisen in ways that may not be entirely truth tracking. I do not see it as a strong advantage of any particular theory that it is able to rescue our notion of self, unless we are able to show somehow that our notions track to something real and therefore any theory must preserve the self. The discussions in this chapter are an attempt to show how we might understand or interpret our notions of the self under such a Materialist Nouist framework, and not part of any kind of points scoring demonstration of Nouism's strengths. In fact, as I will shortly argue, we need to appeal to two things, both body and mind, in order to recover something close to the important intuitions about the self. If Physicalism has no perfect deserver of the title 'self', neither does Materialist Nouism. We can, however, recover a reasonable imperfect deserver of the title.

6.1 Reference and the Self

There are certain statements that are considered to be immune to error through misidentification (IEM) – statements for which we cannot be mistaken about the 'I' in those sentences. These sentences are considered by some to be those in which the self is treated as a subject rather than object. Here's what Wittgenstein (1960, pp. 66-7) said about this:

There are two different uses of the word 'I' (or 'my') which I might call 'the use as object' and 'the use as subject'. Examples of the first kind of use are these: 'My arm is broken', 'I have grown six inches', 'I have a bump on my forehead', 'The wind blows my hair about'. Examples of the second kind are: 'I see so-and-so', 'I hear so-and-so', 'I try to lift my arm', 'I think it will rain', 'I have toothache'. One can point to the difference between these two categories by saying: The cases of the first category involve the recognition of a particular person, and there is in these cases the possibility of an error, or as I should rather put it: The possibility of an error has been provided for... It is possible that, say in an accident, I should feel a pain in my arm, see a broken arm at my side, and think it is mine, when it is really my neighbour's. And I could, looking into a mirror, mistake a bump on his forehead for one on mine. On the other hand, there is no question of recognizing a person when I say I have toothache. To ask 'are you sure that it's you who have pains?' would be nonsensical. Now, when in this case no error is possible, it is because the move we might be inclined to think of as an error,

a 'bad move', is no move of the game at all... And now this way of stating our idea suggests itself: that it is as impossible that in making the statement 'I have toothache' I should have mistaken another person for myself, as it is to moan with pain by mistake, having mistaken someone else for me. To say 'I have a pain' is no more a statement about a particular person than moaning is.

In short, some statements that are immune to error through misidentification are immune because 'I' is used as the subject. In these cases, it is thought, the self is completely eliminable – there would be no loss of meaning to drop the 'I'. For example, 'I have a pain' could be replaced by 'there is a pain' and we could still understand what was meant, and carries as much meaning as moaning does. Suppose then that the 'I' is eliminable in such a manner. Perhaps, then, the self is eliminable in total. We have no need of some special self, some 'I', in order to say the things we say. An elimination of the self in this way helps to avoid any inference to the existence of some mind or soul which is identified with the self (Evans 1982, pp. 216-7):

Unfortunately, many philosophers give the quite mistaken impression that it is only our knowledge of our satisfaction of mental properties which gives rise to judgements exhibiting immunity to error through misidentification. This is tantamount to the claim that self-conscious thought rests only upon the knowledge we have of ourselves as mental or spiritual beings. And this in turn generates the unfortunate, and quite inaccurate, impression that in thinking of oneself self-consciously, one is paradigmatically thinking about oneself as the bearer of mental properties, or as a mind – so that our 'T'-thoughts leave it open, as a possibility, that we are perhaps *nothing but* a mind.

For Evans and others, there is a desire to not postulate any kind of Cartesian mind, but rather keep the focus only on that which is physical (ibid., p. 220):

It is highly important that our 'T'-Ideas are such that judgements controlled by certain ways of gaining knowledge of ourselves as physical and spatial things are immune to error through misidentification: that the bearing of the relevant information on 'T'-thoughts rests upon no argument, or identification, but is simply constitutive of our having an 'T'-Idea. (The fact that these ways of gaining knowledge of ourselves must enter into the informational component of a functional characterization of our 'T'-Ideas – of what it is to think of oneself self-consciously – is the most powerful antidote to a Cartesian conception of the self.)

Of course, the Cartesian Dualist and the Nouist would not at all be worried by talk that suggested some mind that is involved in the self, or is to be wholly identified by the self. That then leaves us a question – do these statements that are immune to error through misidentification give us reason to think the self is so eliminable? Let us look a little more at the difference between statements that are immune to error, and those that are not. If I am in pain, it is hard to make sense of the claim that there is indeed a pain and yet I am mistaken about it being me that is in that pain. When we think about the kinds of cases where we are immune to such misidentification errors, examples like 'I am in pain', the correct explanation is to be found not in the difference between subject/object uses of 'I', but rather in whether we are reporting something about the experience or something about the physical universe. When having some experience of being appeared to redly, I cannot be both right that there is an instance of being appeared to redly and wrong that it is 'I' that am being appeared to redly. There does seem to be (to some, at least) something about our experiences that we cannot be mistaken about, and that it is I that is having this experience certainly counts in that. However, when it comes to drawing inferences from those experiences, inferences that are not logically entailed by the experience, misidentification can come into play. While I cannot be mistaken that it is I that is being appeared to redly, I can be mistaken that it is I that some red object is before. It could be that there is a red apple placed before someone else, and that I have been joined to them via leads connected to their optic nerves so that I have an experience of redness. Here I can be right that there is a red object in front of someone, but wrong that it is I that it is in front of. The disconnect, where the possibility of error through misidentification is introduced, is from the non-deductive conclusions drawn from experiences, and these are typically claims about the physical. To put it crudely, the difference between these types of statements that are IEM and those that are not comes down to some being particular mental ascriptions and some being particular physical ascriptions. William Child argues that drawing the line here where I do is mistaken (Child 2011, p. 377):

...it is wrong to align the as-subject/as-object distinction with the distinction between mental self-ascriptions and physical self-ascriptions. Consider the judgement that my legs are crossed. That judgement self-ascribes a physical property. But whether or not I could be wrong that it is my legs that are crossed depends on the basis upon which I make the judgement. In normal circumstances, I know whether or not my legs are crossed on the basis of how they feel 'from the inside'. And when the judgement that my legs are crossed is made on that basis, it is immune to error through misidentification; if I assert that my legs are crossed on the basis of feeling them to be crossed, it would be entirely

out of place to ask 'are you sure that it's you whose legs are crossed?' But there are abnormal cases where things are different. Suppose I have been anaesthetized. In that case, I cannot feel my legs at all. So if I want to know whether they are crossed, I will need to look and see whether they are crossed - just as, if I want to know whether someone else's legs are crossed, I have to look at her legs and see. And when the judgement that my legs are crossed is made on that basis it will not be immune to error through misidentification; it will be possible for me to be right that someone's legs are crossed but wrong that my legs are crossed - because I see some legs, see that they are crossed, and wrongly think that they are my legs.

This example offered by Child, of a physical ascription (my legs are crossed, known on the basis of how they feel 'from the inside') that is IEM, is not a successful counterexample. Evans himself furnishes us with an example that shows why this is unsuccessful, described here by Shaun Gallagher (2012, p. 188):

Evans, however, does suggest a thought experiment in which the nervous system of Subject A is connected to the nervous system of Subject B [...] in such a way that Subject A receives the proprioceptive input from Subject B's body. When Subject B's legs are crossed, Subject A reports that he (Subject A) feels that his (Subject A's) legs are crossed. In this case, it seems, he is mistaken in a way that violates IEM, since, via proprioception, he misidentifies B's legs for his own.

While this is presumably not possible with our current technology, it does seem physically possible that the inputs from one body are fed into another body to induce particular experiences – for example, the experience of a feeling 'from the inside' that my legs are crossed, even though it is not my legs that are crossed. This would presumably be true for any similar example put forward to claim that the distinction is not between something mental and something physical because here is some claim about the physical that is IEM. So long as the claim is about the physical world, about my body as 'self', then such error is possible – we can separate the experience from the state of the body, at least for all the kinds of examples that are typically given in defence of IEM. This conclusion is what Shaun Gallagher (ibid.) reaches at the end of his paper, writing that 'the true anchor for IEM is the self-specific first-person perspective that characterizes every experience'.

We might find ourselves therefore contrasting two claims, the first of which is immune to error and the second of which is not: that I am having a feeling from the inside that my legs are crossed, and that my legs are crossed (formed on the basis of that 'from the inside' feeling). The former is about the phenomenal, the experience, while the latter is a claim about the state of my body. Both of these claims we typically take to be claims about the self: first, that I feel as though my legs are crossed, and second, that my legs are crossed. There is a single self which both is having an experience and also has a body with legs crossed (or not). The Cartesian Dualist wanted to claim that what the self is, what I am, is essentially and only a mind. I think such a move is not possible, insofar as we are trying to find some single thing that answers to enough of our intuitions about the self. So while I think that there is a distinction to be made here between IEM and non-IEM statements, aligned with mental and physical ascriptions, this is not enough ground to assert that the mind is a good candidate for identifying with the self.

We should distinguish between two questions: what is the thing to which self-attributions attach, and what are the kinds of attributions that can attach to it? The first is a question about 'what is the self?' and the second is a question about 'what (accidental) properties can the self have'. I'm interested here in examining our intuitions, and seeing if, on Materialist Nouism, there is a candidate for the name 'self' that will answer reasonably well to those intuitions.

Consider two 'I' sentences, which make claims about the attributes or properties of some 'self':

I am experiencing pain
$$(6.1)$$

I have two arms
$$(6.2)$$

The first sentence fits well within a 'mind is the self' view. It picks out the phenomenal, the experience, and not the physical. For the Cartesian Dualist and Nouist it may be true that there are some particular neurological (or wider) states that are causally relevant to the reason why pain is being experienced, but the experience of pain itself is had by the mind. As a claim about some property or attribute of the mind, there is no problem with describing the mind in this way.

However the sentence that 'I have two arms' is more interesting. It suggests some biological fact as being an attribute or property of the self. My self, I, has two arms. If the self is a mind, minds do not have arms, so selves cannot have arms. This cannot be understood as a claim about the self, in a 'mind is the self' view. Of course, one who thinks that 'I am essentially my soul' (Moreland and Craig 2003, p. 291) might say that this is only a loose way of speaking, and we do not literally mean that the self (which is a mind) has arms. Rather, the sense is more that the self owns a body, and in virtue of owning a body the self owns two arms. This may be right for speakers like Moreland, but there are other speakers who would say 'I have two arms', and take the 'I' here to be a real self, and not just a loose

way of speaking. Besides arms and other attributes like this, there are other arguably physically based traits that some would take as belonging to the self. Someone may say something like, 'my love of music defines who I am', or 'my biological heritage defines who I am', or they may see themselves as in some important way being the kind of thing that finds its explanation in the biological: love of travelling, romantic interests, hobbies, and so forth. Or, when considering changing the way their brain works in substantial ways - for example, to feel more or less emotion, to stop or start liking particular foods, to no longer be afraid of public speaking, etc – one may think that they would be changing who they are, changing their self. There are communities for which certain physical traits (such as deafness or Dwarfism) are taken to be a real part of their selves, an important part of their identity, and not a loose way of speaking. Members of these communities take their deafness or Dwarfism as a significant part of their selves. So long as we suppose that the biology plays an important part in some of the traits we consider as important to our self, we have reason to think that our ordinary way of talking about the self suggests that the self has not just mental properties, but also physical properties like some of these described.

In short, on Materialist Nouism and Cartesian Dualism, I think it will be difficult to make sense of how we think about our *selves* without talking about attributes of both the mind and the body. There are some statements that are clearly associated with the mind ('I am experiencing X') and some statements that are clearly associated with the body ('I have two arms', 'My < physical trait Y > defines an important part of who I am'). In short, there are two things that are required in order to answer to ordinary talk about the self: both body and mind. Particularly on Materialist Nouism, the mind without the body lacks a love of travel, dance, philosophy, arms and legs, and so on. However, the body without the mind lacks any phenomenology, any consciousness. One without the other gives no self, not in the sense that we use the term 'self' and the kind of 'I' sentences we tend to utter.

This does not mean that the Materialist Nouist or Cartesian Dualist could not insist that we should only admit to a single thing as the self. When we are trying to be precise and not speak loosely, rather than try to retain the way we talk about things, we can instead try to change the language. In this case, we insist there is but one thing that we will allow to answer to the term 'self', and any talk (when not speaking loosely) about the self that suggests that it is at least partly physical must be translated as misleading and mistaken talk of something else. For the typical Cartesian Dualist who allows the mind itself to have memories and thoughts apart from the body, they could say that the physical traits influence the mental and it is in these indirect ways that physical traits belong to the mind – any remaining talk about the self that seems to suggest some biological grounding of the self should be rejected as confused pre-theoretic talk that must now be discarded. For the Materialist Nouist this may also be possible,

but it is a bit more difficult because we have situated, for the most part, changes in psychology in the brain rather than in the mind. Whether we decide to retain our current ways of talking, or to change them, a cost must be paid when trying to be precise in the ways we talk. If we want to retain our ordinary ways of speaking, the Cartesian Dualist and Materialist Nouist will have to identify the self with some hybrid of body and mind. If we want to retain our notion that the self is just a single thing, a mind, then we must see our typical ways of talk as only loose and in need of translation when being precise.

Questions about responsibility, morality, ownership, and more, are tightly linked to physical traits including traits about psychology and psychological continuity, biology, physical relations, and so on. And so the Materialist Nouist should distinguish between two very different 'selves': the physical self, and the mind. The physical self relates to the physical body, while the mind is that which has and gives experiences. The mind has experiences of the world, as mediated through the brain, which is connected in interesting ways to some particular human body more than the rest of the world. That is, when some body is pricked by a needle, a particular satellite mind has an experience as of pain that is not present to that satellite mind when someone other body is pricked by a needle. Such boundaries may change in the future – technology may allow that satellite mind to feel such pain when some other body is pricked by a needle, or not feel pain when the original body is. For now, there is a contingent and convenient line to draw that places one satellite mind with one body, but that line may be blurred. What will remain is that there is a mind having experiences.

On a Materialist Nouism of this sort, memories, personality, and so on are in great part (or in whole) determined by the physical body it is associated with. On this view, psychological and/or bodily continuity becomes an important part of notions about self and perseverance over time almost as much as it matters for the Physicalist who rejects the existence of any kind of immaterial soul or mind. We have two senses of 'self'. These are two very different things, but we are sometimes tempted to apply the same terms to both. On the Materialist Nouist view, both of these concepts correspond to things in reality – and loosely speaking, there really is some persisting mind, and there really is some complex neurological basis for personality and psychology in a body that persists for some time, and is connected in some important way to notions like responsibility.

I do not think that the Materialist Nouist needs to worry about our ordinary 'self' talk much. I think that it is acceptable to speak loosely of the self, but understand that when we speak precisely there is no true 'self', no perfect deserver of the name, that answers to our intuitions and ways of talking. There are minds that persist over time which answers to some of our intuitions and ways of talking but not all, and there is a blueprint in God's mind that describes a universe with humans and arms and legs and, as a

contingent fact, the persisting minds have experiences that are interestingly correlated with particular humans but this may not always be so. What is important is what the Materialist Nouist says there is, and not trying to ensure that original intuitions about the self survive. This is no less true for many Physicalist positions which deny the existence of the self, or at least of a perfect deserver of the term. There may be no perfect deserver of the name self, not for the Physicalist, Cartesian Dualist, or Materialist Nouist.

6.2 Freedom and Morality

In this section I will discuss examples of particular ways to approach freedom and morality in a Nouist framework, first looking at liberty, and then morality. The positions outlined here are not ones that are entailed by the Materialist Nouist position, but rather just examples of ways to flesh out such views.

When evaluating approaches to freedom, we may consider two axes: one between determinism and indeterminism, and the other between compatibilism and incompatibilism. The Determinist and the Indeterminist each make a claim about the way the world is. The Determinist makes the claim that the universe is deterministic, while the Indeterminist claims it is not. The Compatibilist and the Incompatibilist make a claim about whether or not freedom is compatible with a deterministic world. The Compatibilist claims that freedom is compatible with determinism (but makes no claim about whether the world is in fact deterministic), while the Incompatibilist claims that freedom is not compatible with determinism.

Hard Determinists take an Incompatibilist Determinist position. They say that freedom is incompatible with determinism, and the world is indeed deterministic. Libertarians agree with the Hard Determinist about the incompatibility of freedom with determinism, but do not think that the world is deterministic. Some Compatibilists, on the other hand, do not think that determinism is relevant to freedom. We might explain this difference between the Compatibilists and Incompatibilists by examining the notion of freedom they have in mind. Once we are clear about what we mean by our words, it should be easier for the answers to follow about whether 'freedom', defined clearly, is compatible or not with determinism. The Libertarian or hard determinism may be using 'freedom' to refer to a Libertarian notion of freedom where a mind (or the like) is the origin or genesis of some act of will, while the Compatibilist may have in mind a notion of freedom as, say, 'with respect to [...] actions and forbearances' (for example, John Locke (Rickless 2015)). There is room for the Hard Determinist, libertarian, and Compatibilist to agree here: when 'freedom' is referring to the notion that the Compatibilist has in mind, that notion is compatible with determinism. If this were the end of the story, we could just insist we be careful in defining

our terms and then agreement will follow more easily. However, the reason why we care about these questions is not just to define our words carefully, but instead to answer questions about moral responsibility, and central to the notion of moral responsibility is the notion of freedom – that some self is responsible for actions, and is responsible precisely because it was in some important sense free. If we lack the *relevant* kind of freedom, then we lack moral responsibility. There is an important question here to answer about what is the relevant thing that we need to have in order to have moral responsibility.

Libertarians about freedom (van Inwagen 1983, pp. 13-4; Moreland and Craig 2003, pp. 267-9) claim that our free actions are in some important sense up to us (where 'us' here in many cases refers to a mind self rather than body self) in such a way that we are a sort of first mover. Such actions in the physical world are therefore undetermined (or underdetermined) by the physical world – in other words, there are some states of the universe that are not the states that would have arisen given the previous state had God solely evolved the blueprint purely by the rules he has decided upon. Libertarian freedom comes with a certain sense that not even someone who knows our mind intimately could predict with certainty our free decisions and actions. Or, another way to put Libertarian freedom, is to say that the causal chain for some events begin with persons or agents or minds. The event has an agent as a cause, but the agent is not an event with a cause itself: it is "a first or unmoved mover; no event or efficient cause causes him to act" (Moreland and Craig 2003, p. 270) with respect to some particular effect. One motivation behind a Libertarian notion of freedom is to recover some sense of responsibility (Moreland and Craig 2003, pp. 267-9; McKenna and Coates 2015). It is tempting to think that if one was determined to perform some action, then one is in an important sense not responsible for it. And if all our actions are determined, it would seem we have no responsibility, which amounts to something of a reductio of determinism.

The Compatibilist, on the other hand, has in mind a notion of freedom that is compatible with Determinism. To make sense of this, we might distinguish between different concepts that get called 'freedom' or 'free will'. The first notion is one to do with freedom of action. Consider some pair of actions – e.g., catching or refraining from catching a ball. By 'freedom', we may mean that were I to will to catch the ball, I would catch it (but not necessarily, 'and were I to will to refrain from catching the ball, I would refrain from catching the ball'– see Frankfurt (1969)). This concept is compatible with the will itself being wholly determined, and refers only to the power of a body to act as it has willed. The second notion is one to do with freedom of the will. This concept involves the will itself not being determined at all, or at least to have its causal chain begin – at least in part – with some mind or agent, and that be the start of the chain. It is not enough (or even necessary) that I be free to perform the action that I will to perform. What

is important to this concept is that I be free to will what I please, that my will, at least in part, be determined by me (perhaps my immaterial mind) and that be the absolute beginning of the chain, at least in part.

It should be evident that these are two distinct concepts, and it may be that both or neither can be found in the actual world. The reason why we might think these are competitors for the term 'free will' despite being different is because of our concerns about responsibility. Rather than defining free will de re, we may define it de dicto, as the thing that explains our moral responsibility. For example, McKenna and Coates (2015) define free will as "the unique ability of persons to exercise control over their conduct in the manner necessary for moral responsibility". Such a definition acts as a pointer, specifying that it refers to that which is required for responsibility, without specifying what it is that is required for responsibility. Such a characterisation then means that freedom of action and freedom of the will are each contenders for meeting the definition insofar as they are candidates for explaining moral responsibility.

We might then interpret the debate between Compatibilists and Incompatibilists in light of a definition of free will that references an unspecified concept. Under this interpretation, the Compatibilist is saying that the notion of free will that's required for responsibility is compatible with a deterministic world. The Incompatibilist is saying that the notion of free will required for responsibility is incompatible with a deterministic world. In this instance, then, the disagreement is about what's required for responsibility. Both could agree about the kind of 'freedom' we have, but may disagree about whether that kind of 'freedom' is sufficient for responsibility, as seen in disagreements between Hard Determinists and some Compatibilists.

With that in mind, I would like to consider one way to connect freedom to morality within a Materialist Nouist view. I will here sketch a very quick example of a Materialist Nouist moral framework. Imagine a Physicalist deterministic world, sans any kind of mind, combined with a quick sketch of a consequentialist position. We have here physical human bodies that interact and clash. One steals, and others punish those who steal, and such punishments (may) have the effect of leading to less theft overall. The one who steals is responsible in the sense that it is reasonable to punish them because (we might suppose) punishment is effective. That is, responsibility ties not to a notion of retribution for the sake of retribution, but rather because such actions are effective at producing change. It typically makes little sense to inflict a punishment of some sort on anyone other than the one who carried out the act. Because of the particular psychology of humans, it is often counter-productive to inflict a punishment on anyone else in those cases where it can produce an effective change, because such actions are likely to turn other humans against the ones meting out the punishment. In our very quick sketch, we arrive at a place where the purpose of punishment is solely aimed at the benefits it brings. If imprisoning someone for 30 years will produce worse outcomes than imprisoning them for 5 years along with a compulsory program aimed at rehabilitating them, then the latter should be done over the former. There is no place for punishment for punishment's sake, except insofar as the psychology of humans means that the appearance of punishment for punishment's sake can produce overall the best outcomes.

We stipulate (as an interim claim to be discarded later) that right or wrong follows benefits or harms. An action is wrong insofar as it harms us, or is bad for us, and is right insofar as it benefits us, or is good for us. Such a characterisation of morality leaves no place for punishment for punishment's sake, but does allow for punishment insofar as that produces better consequences. This also gives us a notion of morality tying into notions of retribution, responsibility, etc, that allows evolution to be truth tracking regarding moral truths. If evolution can in a sense get a hold of the truth about morality, then we can in part explain how we evolved to have largely true moral beliefs. Moral beliefs that lead to harmful activities reduce the evolutionary 'success' of our species, and in the same way moral beliefs that lead to beneficial activities increase our evolutionary 'success'. That which is harmful or beneficial for us is able to be accessed by evolution, unlike on some notions of objective morality that situate the moral in a realm inaccessible to evolution. In such a way, evolutionary debunking arguments (Street 2006; Kahane 2011) are disarmed from the start. This characterisation of morality only requires a notion of freedom with respect to actions, allowing for a notion of freedom compatible with determinism that gives us moral responsibility.

This, however, is an interim characterisation, and only covers the body side of 'free will' and 'self'. The above is not enough to get us what I (and many) consider to be true morality – it leaves us with mere puppets acting the part of moral beings, without any true moral worth. To complete the picture, we need to finish that final step, the step that gives us the 'why' when we ask why we ought to pay attention to harms and benefits of creatures such as humans. We need a way to ground our concerns about the welfare of physical bodies in a way that completes morality.

Here is one possible Materialist Nouist view that takes the above and breathes some life into it: The activities of physical bodies lead to experiences had by minds. Minds are the *only* things that have experiences. Without minds, the universe is devoid of experience, with human bodies feeling (in the phenomenal sense) no more than rocks – that is to say, nothing. Satellite minds have been created to have loving relationships with God and other minds (a claim that would need to be justified further, perhaps along with a weakening of the simple rule (p. 40)), and the way they have such relationships is through the medium of the physical world. Interaction in a physical universe is the mind's way to communicate with other minds, and indeed the *only* way that minds could communicate. When bodies help or harm other physical bodies, they are performing actions that lead to

experiences being had by other minds, experiences that will communicate concern or enmity, care or disregard. Benefits and harms tracking right and wrong do so only insofar as benefits and harms lead to positive and negative messages or experiences being had by other minds. That is, right and wrong tracking benefits and harms reduces to claims about the kinds of experiences other minds have, and the messages it sends those minds about our relationship with them.

The truth value of moral propositions is ultimately grounded in something that relates to the messages that are sent to other minds. There are many details to be explained here, but this is just a sketch, a pointer to a possible Materialist Nouist framework. Reasoning about right and wrong is possible for humans because the positive and negative experiences had by minds correlates well (but not exactly) with the benefits and harms that certain acts result in. Morality is something that can be reasoned about, not something that is written on immutable and isolated records in another realm such that have to be communicated to us. Murder, rape, theft, and all these other evils are not wrong because such acts are inherently wrong, but because of the effects they produce, and the effects they produce have moral character because of what they communicate (via the causing of experiences) to other minds. This may be what was meant when Jesus said (Matt. 22:37-40 New International Version):

"Love the Lord your God with all your heart and with all your soul and with all your mind.' This is the first and greatest commandment. And the second is like it: 'Love your neighbor as yourself.' All the Law and the Prophets hang on these two commandments."

And also Paul (Gal. 5:14):

For the entire law is fulfilled in keeping this one commandment: "Love your neighbor as yourself."

All the various evils we might care to list are wrong not in themselves but in virtue of how they relate to other minds – and, in short, how they relate to loving other minds, whether that mind be God or a satellite mind. Morality is accessible by reason for everyone (Rom. 2:15), not just those who have been told what is right and wrong.

This is a view of morality that is quite distinct from, say, divine command theory, or indeed any notion of morality that leaves moral truths existing somewhere such that they're inaccessible to the physical world. It takes morality to be something that can be tracked by evolutionary processes, insofar as benefits and harms correspond to positive or negative experiences had by other minds. We need freedom tied to the will, so that we can

have minds that genuinely make choices about how to relate to other minds through the medium of the physical world. Without freedom of the will, without something that originates from the mind that leads to some human acting, there is no sense in which the satellite mind is the one communicating enmity or love to another satellite mind. We need freedom with respect to actions, the freedom for a human body to on occasion act as the satellite mind wills, so that the satellite mind can express its freedom to exercise its will and make a difference in the experiences impressed upon other minds. Only by a satellite mind influencing the actions of a human body within God's mind can that satellite mind communicate with another satellite mind. Each of these two notions of freedom is required for morality, and require notions of the 'self' with reference to the body, and also the 'self' with reference to the mind.

6.3 Final Remarks

When we refer to ourselves, or think about ourselves, we can be thinking about attributes that are physical or mental. There is, for the Materialist Nouist, no perfect deserver of the term 'self', but there is a hybrid between the satellite minds and the bodies in the blueprint in God's mind that they have experiences as of being, that is a close enough deserver. When it comes to thinking about morality, action, and good and evil, it is through the medium of the physical universe that minds can communicate and do good or evil. Goodness and evil are tied closely to the benefits and harms they cause other minds, and this because the benefits and harms correlate well (but not exactly) with the experiences (or messages) this leads other minds to having. Morality ties closely to both minds and also physical bodies.

Chapter 7

Variations

So far I have focused on a particular model of the world, one which involves a central mind that we call 'God', satellite minds, and two way interaction between God and the satellite minds. I have tried to keep the model very simple so that it may serve as a foundation upon which to build more advanced theories. For example, one may wish to expand on such a foundation by having more than one type of mind, each differing with respect to what powers they have, or by weakening the rule that all phenomenology experienced by a mind comes to it from another mind, or by giving communication between minds a purpose (such as communicating love or enmity). It is not my project to develop more detailed theories, but in this chapter we will consider some of the myriad of ways in which a Nouist theory might be modified. Such a review is by necessity brief and shallow due to the sheer breadth of possible variations (even sticking to only the 'interesting' variations).

7.1 Broad Variations

The hub-and-spoke model that I have presented so far is not the simplest, nor the only, foundation. There are at least four dimensions we can consider for potential variations: number of minds, types of minds, number of relations between minds, and types of relations between minds. For the model that has been the focus of this thesis thus far, we have two or more minds, perhaps even trillions or more, at least one for each human, and possibly many more besides for each of the creatures on earth and anywhere else in the universe. For types of minds, we have kept this to just one type, of which both God and the satellite minds are tokens. In the introductory chapter (p. 2) I noted that we may vary types of minds, and thereby vary the way in which we characterise minds. These variations in characterisations can be different enough such that ways of individuating or identifying minds on one Nouist view do not translate in any straightforward way to others. For example,

if we allow one mind to have multiple streams of consciousness, or multiple minds to share the same stream, then we can no longer individuate minds in terms of, say, separate streams of consciousness. We will consider here just some of the variations that would still count as Nouist because of the way in which they put the mental at the foundational level, but with 'minds' that may not correspond to the characterisation of a mind used so far. This does not prevent such views from being Nouist, if they postulate something that would be reasonable to call a mind even if it is not a mind according to some other Nouist view. Such views will still be saying something about the ways in which the mental appear at the foundational levels of reality, even if they don't carve reality up in the same way as the Nouism focused on in this thesis has. Apart from varying numbers and types of minds, we can also vary both numbers and types of relations. In the Nouism considered thus far, we have one type of relation involving experiences being impressed by one mind x onto another mind y, I_{xy} . As for number of relations, I_{xy} relationships exists between God and each satellite mind, going each way, and that is all.

The model considered so far is simple with respect to having just one type of mind and one type of relationship, but less simple by having more than one relationship, more than one mind, and an asymmetry in the network of relations between minds. Therefore, some parts of the model focused on in this thesis are foundational, but some are examples to show how a particular Nouist account might be fleshed out. With four dimensions, and with the cardinality of number of options for each dimension being at least \aleph_0 , it is not possible to consider every option. However, we can say something about some of the more interesting classes of combinations. For example, we may consider the option where there is just one mind, God, or the option where there is a symmetry of relations between all minds, and so on. Here we cover a small handful of variations.

7.1.1 Unity

Some world views have it that there is just one mind. One, a realist form of Solipsism, a presumably less common position, involves there being just a single mind having experiences of being a particular human (for example) who has conversations and lives a life with other human beings, although there is no consciousness behind those others humans. Such a view would fit well within a Nouist framework, with just a single mind and type of mind, with one of the powers of that mind being to impress upon itself experiences.

Another perhaps more common form of single-mind Nouism is one where there are many different experiences had by the one mind, from different perspectives: from Fred's, perspective, Sam's perspective, Jane's perspective, and so on. Unlike the realist Solipsist, every human might have a consciousness behind them, but this consciousness is the *same* mind behind them all. This might accord well with particular Hindu perspectives where there is some important unity to consciousness, where there is but one consciousness having experiences of many different perspectives. We again have one mind with the power to impress upon itself experiences.

Both of these views, in positing one mind, do not follow the simple rule of the Materialist Nouism we've been focusing on where any experiences had by a mind come from another mind. In these Unity models, the source of any experience is the mind itself that is having the experience, and so the I_{xy} relationship is more properly a one-place predicate, I_x , where x impresses upon itself (upon x) some impression I.

7.1.2 Hierarchy

Another modification might be to introduce some kind of asymmetry between minds. There are two ways to do this. The first would be by postulating different types of minds, and the second, like the Materialist Nouism of this thesis, is to postulate an asymmetry of relations between minds. We have already explored how it is that a hub-and-spoke asymmetry can produce a hierarchy. It is an interesting project to see how much of the traits of God as put forward by the Abrahamic faiths could be recovered by postulating no more difference between minds other than an asymmetry of relations between them. However, just stipulating that there are relations between God and the satellite minds in a hub-and-spoke way is an incomplete story, leaving us with the open question of why it is that the satellite minds cannot directly communicate. To flesh out the story and give a reason why the relations between minds should be laid out so, it may be desirable to in fact change what type of mind God is that in some way explains why God is able to communicate directly with all the satellite minds, but they cannot do so with each other. While it is useful to see how far we can get by giving God no specialness beyond his position in the relational network, this is merely a stepping stone that must be stepped off to complete the story. In the Abrahamic faiths, for example, it is common to conceive of God as being a different type of mind. One way to step off the stone is to give God special powers, such as the power to birth a mind (see 8.3.2), or types of control over other minds that is not held by any mind other than God. There are many different aspects of, say, Classical Theism, that would need to be considered carefully before mapping into a Nouist framework, and the process of doing so may reduce the simplicity of the original proposal in a number of ways. Beyond just recovering traits of God, such Abrahamic Nouist accounts may want to introduce further types of minds for angels (and even types of angels), demons, humans, other animals, aliens, and more. Such a proliferation of minds might not be necessary, but it certainly can be considered.

It might be thought that we *need* to postulate other types of minds if we wanted to give an account of, say, angels, demons, gods from Roman

mythology, and so on. This is not necessarily so. It may be enough to postulate greater physical powers to the bodies of the gods, rather than attributing different powers to their minds. We are already familiar in fiction of the idea of different universes with different physical laws, including laws around something we like to call 'magic'. It is not so hard to imagine universes with physical laws that allow for bodies with the kinds of powers that gods like Thor might have. Indeed, many movies and books are attempts to do this, albeit in a far less rigorous way than would be needed to demonstrate it is truly possible. Such powers of gods and wizards have little or nothing to do with powers of minds, and give no reason in themselves to postulate different kinds of minds. On the other hand, there are certain attributes attributed to God in various monotheistic traditions that are harder to explain in terms of simply different universe laws. For example, the claim that everything physical was created by God, along with the associated idea that the satellite minds lack such powers too, or that God is the standard and source of goodness, or that God is absolutely simple, or that God can birth minds where other minds cannot, or that God is necessary in ways that other minds are not, and so on. These kinds of claims may require more of an account in terms of the ontology of a Nouist view than in terms of that which we call the physical.

7.1.3 Democracy

We might also consider a variation of the model considered in this thesis where there is no central mind with a special place in the relational network. Instead, every mind can impress thoughts upon every other mind. In order to think about a Democratic model more, let us first return to the Materialist Nouism that has been our focus so far. In the hub-and-spoke model, I said that we would postulate that God's uniqueness is only his position in the relational network – for no other reason than to see how much we can say without postulating any more. For now, I also said that each mind has a blueprint in it (see p. 84), though the blueprint in each of the satellite minds was not described at all, nor has anything been said about how a satellite mind gets its own blueprint. The blueprint in the satellite minds is not a mirror of the blueprint in God's mind, nor an attempt to mirror it. Rather, the blueprint in each satellite mind should be seen as a distinct blueprint of a universe that may bear little resemblance to the one in God's mind. We may then run the following thought experiment. Suppose we modify the relational network so that one of the (now formerly) satellite minds now occupies the central position, and all other minds, including (now formerly) God, can interact only indirectly via this newly centralised mind. Under the hub-and-spoke model, this is all that is required for a different mind to play the role of God, and as a result have a potentially different universe be the 'actual' universe. The satellite minds (of which (now formerly) God is one) will still have experiences of being in a universe, but it would not be the universe we are familiar with. The universe, as experienced by the satellite minds, depends on the blueprint of the 'actual' universe, and which blueprint is the 'actual' universe depends in part on which mind is the central mind. Change the mind, and you change the blueprint at the hub and therefore (possibly) the universe. In other words, if you rotate which mind is at the hub, then it's a different blueprint in the central position.

In a democratic model, there is no such central mind giving some consistent universe experienced by other minds. On this model, any mind may end up impressing experiences upon any other mind. If we wish to consider this as an alternative hypothesis about our universe, we would want to recover some of the consistency of our experience, to recover our claims that we share a universe with other minds, and that (generally) the sun will rise again tomorrow (and will continue to for a while longer yet), the earth will keep spinning, and so on. If each mind's experiences come to it from many different minds, based on many different universe blueprints, it is harder to give a story about a consistent, stable over time universe. Here are two ways to try to do so.

First, in a democratic model, it may be that every mind plays the role of God to every other mind. For each mind, they don't experience being in just this universe (call it α) containing Australia, the Milky Way, trees, and atoms. Rather, they experience being in every universe described by each blueprint in another mind. In short, they experience being in as many universes as there are minds, minus one (themselves). As was described in 5.4.3, memories are something stored in brains and not minds, and so are local to a universe, so we would not expect a mind experiencing being in universe α to have any experience of remembering being in universe β or γ and so on. The memories of α are contained within α , and the memories of β are contained within β , so there will be no recollection of β while experiencing being in α . Minds are constantly experiencing multiple universes, but within each universe have no way of recalling their experiencing any other universes – a kind of dissociative identity disorder for minds!

Second, in a democratic model, it may be that minds somehow collaborate to form an agreement about the correct blueprint. For example, while each mind has its own blueprint, the shape of that blueprint is updated via encounters with other minds, so that in the long run blueprints in various minds become indistinguishable. In this way, when a mind experiences the universe, it does so from a blueprint that is in significant agreement with the blueprint in other minds.

There are likely other ways to have democratic Nouist models with blueprints of universes inside each mind. Of course, we may also consider non-Materialist Nouist democratic accounts, ones that rid themselves of any notion of a blueprint, and instead adopt a Berkeleyan notion where perceptions are all there are. An example of a democratic Berkeleyan style Nouism has been offered by Helen Yetter-chappell (2017). In her account, there is no central mind that plays the role of giving a consistency and regularity to perceptions. Instead, she postulates the existence of some (possibly) mind-independent unity of consciousness. This independent consciousness substrate is a collection of all possible phenomenal perspectives. When the finite minds have perceptions, those perceptions are quite literally the perceptions in this substrate (the very same token) (ibid., p. 4):

The external world (physical reality), on the view I want to develop, is a vast phenomenal unity: a unity of consciousness, weaving together sensory experiences of colors, shapes, sounds, smells, sizes, etc. into the trees, chairs, black holes, and central nervous systems that fill the world around us.

Here's the basic picture: External reality is a vast unity of consciousness, independent from all finite minds. This unity is vastly more complex than the unities we're directly acquainted with. Consider my cup. The cup exists independently of any (finite) minds insofar as it is a part of this vast phenomenal unity. But what's included in the phenomenal unity isn't merely the sensations I have when perceiving the cup from a particular vantage point. The unity must include the experience of the cup from every possible perspective it could be viewed from, binding together the experience of the cup from every possible angle and also from every possible sort of perceiver (humans, bugs, bats, color-inverts, etc.).

On such a democratic model, there is no God type mind, but neither is there an underlying blueprint from which perceptions are determined. Instead, perceptions are there, directly, in the unity of consciousness.

Another democratic non-Materialist Nouist model has been presented by Donald Hoffman and Chetan Prakash. Theirs is a 'Conscious realism', a monism that takes consciousness to be fundamental (Hoffman and Prakash 2014, p. 7). Hoffman and Prakash offer what they (unfortunately) call a definition of a conscious agent, as follows (ibid., pp. 5-6):

...to construct a theory of consciousness we propose a simple but rigorous formalism called *a conscious agent*, consisting of six components. We then state the *conscious agent thesis*, which claims that every property of consciousness can be represented by some property of a conscious agent or system of interacting conscious agents.

. .

For convenience we will often write a conscious agent C as

$$C = (X, G, P, D, A, N) \tag{7.1}$$

We have the world W, an experience X, and an action G. From the world to experience, we have perception P. From experience to some action we have a decision D. From action to the world we have an act A. D, A, and P are called *channels*, and each channel has a capacity, 'a highest rate of bits per channel use, at which information can be sent across the channel with arbitrarily low chance of error' (Hoffman and Prakash 2014, p. 7). Assuming that the channels are firing messages in a discrete manner, and in step with each other, N is a counter to measure how many messages are sent. The world (which contains other conscious agents) sends an experience to another mind over the perception channel P which leads to experience X, that mind then makes a (speaking loosely, using the terms of Hoffman and Prakash) decision D on the basis of the experience X to perform some action G, and performs the action G by the act A on the world W, which forms the basis of perceptual inputs for other minds. Suppose there are two conscious agents, C_1 and C_2 . On this model, the actions of agent 1 are the perceptions of agent 2, $P_2 = A_1$. Similarly, the actions of agent 2 are the perceptions of agent 1, $A_2 = P_1$. Also, importantly, the count for messages for each agent are equal, that is, $N_1 = N_2$. In a similar manner, further conscious agents can be added, to build up a network of minds. There are interesting parallels here to Nouism as discussed so far, where there are messages of sorts being sent between minds. In the Nouism of this thesis, there are likewise experiences had by minds received from others, some kind of 'decision', followed by a return message that forms the basis of an experience had by another mind. We find parallels of these components in the model of Hoffman and Prakash. Where their model differs is that they allow for a myriad of agents interacting, which can both interact with each other and as a group may form a new conscious agent. This is a democratic model, at least in the sense that no consciousness is given any special privileges, and the world itself arises from, or is, the collection of consciousnesses.

7.2 Nouist Variants and Criticisms

We considered some variations just now in broad terms, but we can also take a look at some alternative models where we are more specific about how the types of minds or relations differ. Here I consider a handful of such ways to vary and flesh out Nouist theories. However, while I outline possible variations, there are also significant concerns that need to be solved before embracing such changes. I think that at least one such variation, possibly more, is going to be needed for a satisfactory and fleshed out Nouist position. However, which variation(s), and how, is a thornier question, and one I do not answer here. Instead, I consider some possible variations and the problems we run into as we start to walk down that road.

7.2.1 The Simple Rule Weakened

The simple rule about phenomenology that was introduced on p. 40 was: If there's something that it's like to x (some phenomenology of x'ing), then the experience as of x'ing is an impression from another mind

As far as Nouist and Cartesian Dualist views go, insisting on a rule like this is unusual. It is more common for such Dualists to think of the mind as being the originator of some of its own phenomenology, or at least, for the phenomenology of the mind to not be tied so closely to a particular human body as it is on this Materialist Nouism. Instead, Dualists attempting to motivate the existence of of a body independent mind will point to purported out of body experiences to argue that there need not be a body for there to be a mind having experiences of seeing, hearing, and so forth. However, as far as evidence goes for a position, these are not so strong. The problem is that descriptions of the phenomenology of experience independent of bodies is still from a curiously human perspective, as though it is embodied. Any Nouist account that weakens the simple rule will need to give a good account of body-independent phenomenology that doesn't look human. Here I offer some reasons to motivate this as a problem that needs solving, by examining a typical Cartesian Dualist position that would share significant overlapping conceptions of the mind as with a Nouism that weakens the simple rule. Consider the following brief account (note that I am not concerned with whether the account is true or not) (Habermas and Moreland 1998, p. 158):

Another case concerns five-year-old Rick. He suffered from meningitis and was rushed to the hospital in an ambulance. As his body was whisked away, he decided to "stay behind". When he did, he was able to watch different family members and their grief-stricken reactions to his emergency. In one situation he watched his father weeping as he entered the car to take the family to the hospital. Then Rick rushed to the hospital, "arriving" ahead of the ambulance, and watched hospital personnel move a girl about twelve years old out of the room he was to occupy.

There are a number of stories like this one, with details that are sometimes claimed to have been verified afterwards. Let us set aside the question of whether or not such stories are true, and instead assume for the sake the argument that they really occur as the experiencer reports them to have occurred – if we assume all that, do we have reason to agree with the Cartesian Dualist that the phenomena of remembering, thinking, desiring, all originate from the mind having these experiences? I am interested in the detail or character of these stories, as a way to draw out a significant difference between the view I present in this thesis, and that of a typical Substance Dualist. There is something not quite right about such stories, particularly

when it comes to their use as support for the particular kind of Cartesian Dualist position we are considering.

Let us begin examining the character of the story. Note in the story how it is from a curiously human perspective. Humans can see particular ranges of colours, precisely because these are the wavelengths of light that our retinas are able to pick up, and our brain interpret - that is, we can see these wavelengths and only these wavelengths because of facts about our physical bodies. In the story above, the boy sees his family - but seeing things like family members requires seeing, for example, light within the visible spectrum and not light from the background cosmic radiation. Consider also the perspective of a human over that of a gnat. When we look at a tall building, it is harder to get a sense of the full perspective as opposed to the view from a fast moving aeroplane where such things appear significantly smaller. The perspective of a gnat viewing a human would be similar. The boy in the story sees his family, but it appears that he sees them from human scale and not gnat scale, and certainly not from a scale that would be too small to identify humans. This scale is human scale, in the sense that it is at a particular scale of a physical body. In some stories, we have reports of people hearing conversations that took place. Hearing conversations involves vibrations of air particles which causes vibrations of an ear drum, which results in neurons firing. Just like our human bodies cannot register all light, so too our ears and brains do not detect and interpret all vibrations or waves, such as gravitational waves or radio waves. Hearing humans speak requires the ability to detect and interpret vibrations of particular frequencies and substances and not others. Again, then, hearing humans speak in such OBE's suggests limits of the disembodied mind that curiously match the kinds of limits that a human body has.

Overall, the experiences reported in OBE's are curiously human in many respects, in the sense that they are shaped in ways that we would expect them to be shaped if the viewer was human and not, say, an alien with a different biology. If such experiences were truly free of the human body, we would not expect them to be so human-centred, with sounds in the frequency that humans hear, images from the visible spectrum but not the background cosmic radiation, etc. Furthermore, if they were truly free from any body, we might wonder how they would have any experience at all. Experiences are tied to the kinds of bodies that we have. If the experiences of those in an OBE were entirely alien, then these stories would still suggest some body—just an alien one. An OBE suggests that rather than being truly free of all bodies, an OBE is a (perhaps different) form of embodiment—one that still is able to see in the visible spectrum, hear sounds a human can hear, have a fixed location in a region (or point) of space, etc.

Contrary to the kind of Substance Dualist position argued for with OBE's, I have been presenting a Nouism that situates far more than is typical for a Nouist or Substance Dualist in the body rather than the mind. Our experiences as of seeing people grieving, as of thinking, as of reflecting on a philosophical argument, these are all experiences that are given to us by God and are *not* operations of *our* mind. That is to say, if we were to be *truly* freed from bodies, we would not be travelling without form around the world, viewing lost family members. We would instead be having a very primitive or even non-experiential existence. There would be very little that it is like to be such a mind separated from a body of *any* sort (in other words, to be separated from God).

This should not be interpreted as me saying that OBE's can be explained purely in terms of the human body. Rather, that I think OBE's, whatever they are, are experiences impressed upon satellite minds by God, rather than instances of satellite minds being separated from bodies and truly being 'free'. They are embodied experiences just as much as our ordinary everyday life is. If they genuinely involve separation from human bodies, then they involve another kind of embodiment, one that is no more or less 'free' than human life. Even other realms such as heaven and hell, if real, can be considered as physical realms. If further discoveries mean we can show that such OBE's are entirely explainable in reference to our human bodies, then that will be perfectly consistent with the Materialist Nouism of this thesis. If it turns out that these are not explicable in terms of just the typical kinds of physical entities like humans, radio waves, trees, etc, then that will also be consistent with the Materialist Nouism of this thesis (and even some forms of Physicalism). OBE's, if verifiable, do not lend support to the notion that things like remembering, thinking, desiring are operations of the satellite mind having those experiences rather than something that comes to it immediately from God. OBE's, insofar as they seem to be embodied experiences of some sort, do not support the claim that satellite minds are liberated to continue to do things like remembering when separated from any body.

It may be hard to make sense of the idea of a Cartesian mind that has experiences of the world that themselves don't involve some kind of embodiment, and therefore don't originate from that body. However, we can say some things about what it might be like to have Cartesian minds that are the originators of some of their own phenomenology. The most plausible candidate for such phenomenology is cognitive phenomenology such as remembering, thinking, desiring, imagining, and so forth. Now, clearly, some of this phenomenology finds its explanation at least in part in the kind of body that mind is associated with. Romantic desires, for example, are deeply intertwined with bodies. The internal monologue of our inner voice is sometimes, if not always, experienced as being in a particular language, and the Cartesian Dualist may want to say that language is at least in part understood by or learned by brains. But there may be aspects of these rememberings, thoughts, desires, imaginings, and so forth, that could be said

to come from the mind itself. That is, that if the mind were cut off wholly from God, that mind would still be capable of some thoughts, have some memories.

In a Materialist Nouist framework, such a mind may work as a kind of feedback mechanism. We described God as impressing an experience on a mind, which leads to an update in the blueprint of that mind, and then an experience being impressed back on God. In a similar way, the mind impresses upon *itself* some experience of thinking, remembering, and so forth, and (subconsciously) on the basis of those reflections updates its own blueprint which leads to a change in the kind of experiences it subsequently impresses upon itself or God. Under this kind of model, the phenomenology of thinking, remembering, and so forth is somewhat epiphenomenal – the experience of thinking arises from something inside the mind, but is not itself an originator. However, it is also potentially causal, as the mind updates its own internal blueprint on the basis of the phenomenology of that thought, memory, and so on.

Here is one reason why I think one may be motivated to have minds be the source of some of their own phenomenology. In Chapter 6 we looked at the idea that there are two things in a Materialist Nouist framework that might be deservers of the term 'self'. This was done because some of what we traditionally associate with the self are things that belong to the body. However, those who think there are immaterial minds also want to associate the self with those minds. One way to have a more deserving contender for the self is to give it more of the qualities we typically associate with the self. If such a mind can, for example, think, reason, remember, desire, and so on, then it is a much closer fit to our conceptions of the self than is either the body or the mind when we adhere to the simple rule that all phenomenology comes from other minds. When we weaken the simple rule, we can more meaningfully attribute things like desires, intentions, plans, wishes, hopes, and more to minds.

Supposing that we are able to find a way to sensibly weaken the simple rule, there are other advantages to be found. When we practice science, we are trying to uncover (at least in some instances) the underlying structure of the universe, trying to learn what the blueprint is in God's mind. If we allow minds to be the source of a significant amount of their own cognitive phenomenology, we can start to tell a different, or at least more detailed and interesting, story about the communication between minds. We could say something like the following. The phenomenology of experience tells minds something about the nature of the universe – about the blueprint in God's mind. Minds, being sources of their own cognitive phenomenology, can reflect upon experiences: things like the content of those experiences, why the phenomenology of this particular experience is followed by another most of the time, etc. By building up a body of evidence in the form of experiences, minds can begin to infer the nature of the blueprint in God's mind. It is

then not just brains, but also minds, that are deeply involved in scientific enterprise. We can then say something more about how phenomenology is like a language, standing as signs or symbols of some underlying physical structure (the blueprint in God's mind), and experiences are the sentences of that language. There are interesting thoughts to be explored here (and their related problems), some of which unfortunately have ended up on the cutting room floor.

Of course, the prices to pay for weakening the simple rule have already been covered in some detail. There is a significant loss of simplicity once phenomenology can come from both other minds and from the mind itself experiencing the phenomenology. Furthermore, something would need to be said about which parts of the phenomenology of thoughts (or other cognitive phenomenology) originate from the mind having the experience and which comes from externally (typically, from the body). There is much about even cognitive phenomenology that seems to find its explanation in facts about the universe, including facts about the kinds of creatures we are. An account of this separation becomes important once we identity two separate sources of phenomenology. While I suspect a weakening of the simple rule will be required, weakening it must be done with great caution, considering carefully all the concerns described so far.

7.2.2 No Blueprints

Blueprints in Materialist Nouism play the role of giving us something behind the experiences, behind the phenomenology. Unlike Berkeley's Identity Nouism, or at least Berkeley as we have constrained him (setting aside his remarks potentially allowing for abstract ideas within God), we do not want to settle with saying that the appearances are all there are, for reasons set out in section 2.3 on p. 23. By putting a blueprint in each mind, we allow for something behind the phenomenology, something that explains why a mind is experiencing some particular phenomenology, but is distinct from the phenomenology. The blueprint itself in God's mind is, more or less, of the kind of material universe that the Physicalist tells us there is. That universe of the Identity Physicalist is not a universe of pure phenomenology, but rather one of trees, rocks, atoms, and so forth, with the phenomenology being identified only with, say, particular firings of neurons. The Materialist Nouist (and indeed the Physicalist) can appeal to this non-phenomenal universe of trees, rocks, atoms, and so forth to explain why we have the phenomenology we have, its consistency, and so forth.

In short, the problem is to be able to explain the following. Suppose some mind has experience A, and then experience B. Why did this mind have an experience of A followed by B rather than A followed by C? There appears to be no contradiction with having A followed by either B or C, so there must be something beyond the phenomenology that explains why

there was one ordering rather than another. In Materialist Nouism, the explanation is given by having a non-phenomenal blueprint in minds that provides the explanation for why. Moreover, this blueprint is of a universe of the sort we describe in, say, the sciences. The reason why a mind has an experience of tree leaves waving in the wind is to be found in a blueprint which describes a universe of trees, winds, humans, brains, and so forth. In short, precisely the kind of explanation that we have come to be used to.

Without a blueprint or some equivalent, we are at a loss for how to explain the particular sequencing of experiences. This was a problem for Berkeley, and will be a problem for other Identity Nouist accounts. We need something that is both independent of the phenomenology it explains, and is also dependent on minds. Independent of the phenomenology in order to explain why there are the particular sequences of experiences there are, and dependent on minds because this is a Nouist account where minds and their contents are all there is. Blueprints, or something equivalent, are required. Of course, this does not mean that every mind must have a blueprint. It could be that for some minds, such as the satellite minds, there is no blueprint. Instead, these are nothing more than seats in a theatre, experiencing whatever God impresses upon them, without offering anything in return. There is no blueprint within them, and so no experiences impressed upon God in return.

7.2.3 Asymmetry of Powers

Nouist accounts may differ in terms of types of minds that they postulate. The Materialist Nouism of this thesis postulated one type of mind, but each having different positions within their relational network: God is unique by being the hub of the network, and not through any special powers. However, we could easily make God unique by giving him other powers. When looking at the Abrahamic faiths, one power that seems to be given to God that other minds lack is the power to create. In the Nouism of this thesis, nothing particular was said about how it is that, say, minds come about. All we have said is that there are minds, and that they all have particular powers, and they all have these particular relations to each other. A question remains, then, about where these minds come from. Did they always exist as God did, or were they created? If they were created, can more be created by other minds?

We might worry that if all minds share the power to create other minds that there will be a massive proliferation of minds. Moreover, it doesn't offer any explanatory power to allow for such a proliferation. We might allow for each mind to have a blueprint of a unique universe, and that mind then creates other minds for which it acts as the hub, with those minds themselves creating other minds for which they act as the hub. While such a model is possible to describe, and may be appealing to Latter Day Saints

(who say that "As man now is, God once was. As God now is, man may be." (Snow 1840)), it doesn't provide us with any explanatory power, and differs strongly from the intuitions of most. Moreover, the Abrahamic faiths treat the created as being somehow different to God, lacking God's power and position. It may therefore be appealing to say that the kind of mind that God is is different to others. God alone has the power to create other minds, and therefore is the only central mind. For more discussion on the birth of minds, see section 8.3.2.

It may also be desirable for people of some particular faiths to give God other powers than the power to create minds, though such should be done slowly. While God in Abrahamic faiths is credited with creating the universe, nothing special needs to be done to account for 'creation' other than placing God in a unique position in the relational network. We do not gain any obvious explanatory benefit by giving God some other special creative power, and it's not clear what such a power would be other than to say that the blueprint in God's mind is special, and operates differently. However, there is benefit to having blueprints in the satellite minds as well, in order to give an explanation of the experiences they impress upon God, and it's not clear what advantage would be gained by removing blueprints from the satellite minds. There would be a real loss of explanatory power, as well as the creation of a greater diversity between minds, for no clear advantage.

We may wish to introduce some difference in God's mind over the satellite minds to explain why it is that God can impress experiences upon other satellite minds, but the satellite minds cannot do this themselves on other satellite minds. It is not clear to me what would be an appropriate asymmetry, but here is one example. If God is the only mind able to birth other minds, then give minds the power to impress experiences upon children or parents only. God, as the only parent, can impress experiences upon every other mind, but the satellite minds having only one parent and no children can only impress experiences upon God.

There are other ways that some may wish to make God unique, though such developments are beyond the scope of this thesis, so here is a brief look at three more. First, one may wish to have God occupy a special role as the source or standard or measure of 'good'. To have this, one would have to say something about how God plays this role, and such a story may involve attributing something unique to God's mind that no other mind has. Second, one may think that God is a necessarily existing being, and it might be thought that this requires some sort of special powers for God. This is not necessarily so, and will depend on the reasons for thinking that God exists. For example, if the reason was one that shows merely that some mind exists necessarily, and from it every other mind comes, then this doesn't require any special powers being attributed to that necessarily existing mind other than what has already been specified. Finally, some

say that God is absolutely simple. If some sense can be made of this (and certainly the Materialist Nouism of this thesis suggests God has parts given some characterisations of what it takes to be a 'part', in the form of an internal blueprint, an interface for receiving impressions, and for sending impressions), then it may very well be that such claims to simplicity could be made for satellite minds as well. Just like with necessity, this would require no postulating of special powers for God.

It might be thought that God is different from the satellite minds, because the satellite minds have a 'self' (as described in Chapter 6) but God does not, in virtue of God lacking a 'body' in his blueprint (apart from any incarnation theologies). However, this is not quite right. On one Materialist Nouist account, for a satellite mind to have a body, it requires there to be a blueprint of a universe in God's mind, and for God to impress experiences on the satellite mind as of having some body. In the story developed here, there is a symmetry here, and satellite minds have their own blueprints and impress experiences upon God. Those experiences may be as of a kind of embodiment as well. This would suggest that God, rather than having one kind of body-self, has as many as there are minds sending impressions to God. This may sound strange, and while I will agree, I see no technical fault with it. For those Nouists that weaken the simple rule though, such strangeness will play a lesser role in their theory.

Overall, it may be desirable to introduce some asymmetry between types of minds, but such introductions should be done with caution. It may be that the motive behind introducing an asymmetry can be addressed without doing so.

7.2.4 Unlink Minds and Bodies

So far we have been operating under the assumption that there is exactly one unique mind for each human body, and perhaps the same for other animals, or at least the higher order animals. Some Nouist theories may break this assumption. We have already considered some ways in which this can be done, when considering the Unity models above (section 7.1.1). The Solipsist model involved there being less than one mind per human body, and indeed only one mind for one body in total, with the rest having no mind – that is, there are humans with no minds. We also considered a variant where there was likewise one mind, but that mind was shared between all humans. There was precisely one mind for each human body, but there was also precisely one mind in total (and also many human bodies).

One could vary these theories in other ways. Unlike Solipsism where there is exactly one mind associated with exactly one human, we have more minds, either a small number or a large, each associated with a human body, but not every human body. In short, there are a number of humans with minds, but there are also some without. Such humans lacking minds would be Chalmers' zombies, moving and acting but without any associated phenomenology. There is a question about whether such humans could and would operate in the same way as minded humans, a question we touched on in sections 4.4 and 5.2.1 when we discussed whether minds can be causally upstream. If we allow for minds to be causally upstream, then such zombies may be able to be identified among us, because there is the possibility for differences in behaviour, although the scope of such differences will depend on the Nouist theories. It could be that such differences would be large, such that these zombies act like somnambulists, or they could be subtle so that they can rarely if ever be detected. On the other hand, if we do not allow for minds to be causally upstream, then such zombies would be indistinguishable from humans with a conscious mind 'behind' them. On this view, behaviour is driven entirely by facts about the physical universe—the blueprint in God's mind—and are not influenced by the satellite minds in any way.

We could also allow other permutations. Rather than one mind that is shared between all human bodies, we have multiple minds that are stretched between two or more humans, but not across all. Or, in some cases, many minds associated with the one human body (Mark 5:9 New International Version):

Then Jesus asked him, "What is your name?". "My name is Legion," he replied, "for we are many."

Whether it could be noticed by humans that there are many minds associated with some body is likewise an open question that depends on the Nouist theory in question. Again, if minds are not causally upstream from physical behaviour, then there is no way to tell. If they are, however, then such effects may be small or large. Perhaps it is much like Legion above where the behaviours are quite obviously different, or more subtle where such behaviours cannot practically be detected. However, each of these are possible Nouist variants: God can receive impressions from two or more minds that relate to the same human body, and God can give impressions to two or more minds that are given on the basis of the same human body. Minds and human bodies are logically distinct things on Nouism, and so they can be separated in all these ways discussed and more.

7.3 Final Remarks

What I have presented so far is both a foundation for many Materialist Nouist accounts, as well as an example of how to flesh it out somewhat. The Materialist Nouism focused on in this thesis is not the simplest, but is simple in important ways, and demonstrates how to build such accounts and what is involved. In this chapter we have now considered some of the many possible

Nouist variants, and mapped some of them to existing views that have been sincerely held by some. We might introduce more types of minds, more types of relations between minds, vary the number of minds, and vary the number of relations. These are the primary ways to vary Nouist accounts. When we come to consider the blueprint in God's mind, and therefore the relation between minds and the universe, there are more variations to play with, variations where we can allow for more or less minds per human body than we are intuitively inclined to give. Unsurprisingly, there is a vast range of possible Nouist variants, just as there are a vast range of Physicalist variants. The one examined closely in this thesis has been chosen for the sake of having something to focus on, and for its congruency with common views about God and minds.

Chapter 8

Comparing Theories

At the outset, I stated that my intention was not to convince the reader that Nouism is correct, but that it should be considered as a reasonable alternative to Physicalism. However, a comparison can be instructive if not interesting, so with our remaining time I will give a detailed description of which Physicalism I think is the best to compare with and why, and then draw some explicit comparisons between that Physicalism and Nouism of the sorts we have been looking at thus far. The view of this thesis has been presented not just for the sake of developing such a view, but because I suspect such a view has value as a rival to other popular accounts. If it is to act as a rival, then some comparisons need to be made.

I am not interested in comparing Materialist Nouism to Dualist views since I considered them in brief already in Chapter 7, and, more importantly, Dualist views are objectively less simple than Materialist Nouist and Physicalist ones. If we can make do with assuming fundamentally just minds, or fundamentally just physical stuff, then there is no reason to posit the other remaining component as a fundamental part of our ontology. Furthermore, by focusing just on Physicalism, the comparative task becomes simpler. Comparisons to other views may be useful, but given Physicalism's popularity, if Materialist Nouism compares well to Physicalism then it may gain favour against other views too through the transitivity of betterness (setting aside objections to such transitivity (Rachels 1998; Temkin 1995)).

8.1 Physicalism

At the outset of this thesis, I declined to explicitly define Physicalism, and instead pointed to the kinds of views that fall under this title. Generally speaking, Physicalists think that when it comes to the causal world, there are fundamentally only physical causes and effects, where 'physical' can be understood as the sorts of things we are familiar with under that name. The claim of the Physicalist, then, is that there is physical stuff, and this stuff

does not depend on anything else. Contrast that to the Materialist Nouist, who says that talk of physical stuff like trees is to be translated into talk about a blueprint in God's mind. Physicalism, on this understanding, is very broad, allowing for there to be major changes in our best physics theories, and even for the universe to turn out to be very different to how we think it is, without threatening the truth of Physicalism. We can talk about counterfactual worlds that involve fire breathing dragons and spell-flinging wizards, and still take ourselves to be talking about worlds compatible with Physicalism. Or we can talk about worlds with no gravity, with 2 dimensional space, or any other myriad changes like these, and still be talking about worlds compatible with Physicalism. We should avoid anchoring Physicalism in terms of the specific entities of our universe, the non-existence of which should not affect the truth of Physicalism.

Let us distinguish between Reductive and Non-Reductive Physicalism. Reductive Physicalism claims that all typically mental things reduce to the physical, while Non-Reductive Physicalism claims that there are some things that are in some sense grounded in but not reducible to the physical. Materialist Physicalism is a Non-Reductive Physicalism, while Identity Physicalism is a Reductive Physicalist account (see section 2.1). My focus for the comparative part is going to be on Reductive Physicalism, for it seems to me that Non-Reductive Physicalism is actually a Dualist position when we pay attention to which propositions, rather than which sentences, each of the proponents assents to. Moreover, it seems to me that this is obvious (David Braddon-Mitchell (2007) has made similar arguments against emergentism, claiming it to be Dualist), but that this fact is missed by many Non-Reductive Physicalists for a handful of reasons (to be discussed later). If it turns out that Non-Reductive Physicalism is a form of Dualism, then our primary point of comparison need only be between Reductive Physicalism and Materialist Nouism. Only once these simpler Reductive Physicalist and Materialist Nouist accounts have been ruled out should we look to commit ourselves to more complicated Dualist (or more) accounts such as Non-Reductive Physicalism and Cartesian Dualism.

Showing that Non-Reductive Physicalism is a Dualist position primarily involves explaining what we mean by particular words, and then the conclusion follows rather straightforwardly. First we need to understand what it is we want from each of Monist and Dualist views. Views like Physicalism, Substance Dualism, Neutral Monism, Nouism, and so on, are taken to be accounts of the most fundamental parts of the world. They are not (necessarily) accounts of things like numbers, possibilities, logic, and so on. Rather, such accounts are intended to explain things like: trees, rocks, atoms, pain, experience of seeing red, and so on. There is a hard to define, but reasonably well intuited set of things which these views are each competing to explain.

What each view says is, "Grant me the following assumptions, and I shall show you how to explain everything else", where 'everything else' is to be

understood as the set of things we take views of this sort to be attempting to account for. And so, each view asks for particular tools in its toolbox which its defenders take to be sufficient to account for everything else. The Monist Physicalists asks for just the physical (either substances, or properties and neutral property bearers), the Dualist asks for both the physical and mental (either substances, or properties and neutral property bearers), while the Nouist asks for just the mental. By helping themselves to only these kinds of things, each proponent hopes to explain everything else.

Take, for example, an atom. The Physicalist postulates the existence of some fundamental kinds of physical entities (e.g., strings and/or fields), and argues that these are the right kinds of things to arrange in particular ways to produce higher level entities like protons, neutrons, and electrons. An atom of hydrogen is nothing over and above protons, neutrons, and electrons appropriately arranged, in a universe with physical laws of the right sort. With all the parts in place, you have a full account of an atom, and there's nothing left to say.

One of the most difficult things that a Physicalist view needs to account for is the mental. My being in pain, seeing red, remembering, etc. Let us distinguish between three views that are called Physicalist: Eliminativist Physicalism, Reductive Physicalist, and Non-Reductive Physicalism. The first of these views, defended by philosophers like Daniel Dennett (1992), asks 'what qualia?'. It effectively rules out the existence of any of these mental things that are sought to be explained – so called 'qualia'. For my part, eliminativism is so strange as to seem a preposterous position: I know clearly that which it is that a Physicalist view needs to account for, and why it is difficult for Physicalism to do so. When someone takes a position like Dennett's, it leaves me wondering whether Chalmers' zombies walk among us to not see that there is something here to be explained. More seriously, when a position seems so obviously wrong, yet is presented by a philosophically competent speaker, I take this as a warning sign that perhaps we are defining our terms differently. Rather than trying to unwrap the different senses of the word 'qualia' to see whether our disagreement is substantive, I will set aside eliminativism after making a short remark: eliminativism, if using words in the sense as I do, is not in danger of being Dualist, and so not a target of the argument that follows.

The Reductive Physicalist *identifies* some physical state or set of states with some typically mental stuff. For example, my pain just is identical to some particular firing of neurons, or to firings of neurons in a body of a particular sort, and so on. My seeing red just is identical to some particular different firing of neurons. And just like an atom is multiply realisable, so too can typical mental stuff be multiply realised. Even though each atom is unique (at the very least, in virtue of its location in space and time), by the word 'atom' we mean a particular structure that is incompletely described. By being an incomplete description, many different sets of physical entities

fit the description. So too with pain, or seeing red, and so on. Even though each experience is unique, we can use the word 'pain' to mean whatever incomplete description of a structure that includes all and only the stuff we call pain (if indeed such an incomplete description is possible – our usage of the word may have to change as our understanding increases). On this Reductive Physicalist account there is nothing special about the kind of structure we call 'pain' that is able to produce pain. It is a term of convenience for a general type. Each thing that we call pain is unique, at the very least in virtue of its position in time and space. Each individual pain just is that particular firing of neurons, and so on. It is nothing over and above it. Pain, as a more general thing, is just an incomplete description, a general type of physical state that contains under it a variety of different physical states¹.

The Non-Reductive Physicalist says something different. He says that pain is something over and above some particular firing of neurons, and something over and above a particular incompletely described structure. Unlike the Reductive Physicalist, he doesn't say that 'pain just is identical to neurons configured x-like'. Mental stuff cannot be reduced wholly to physical stuff (either completely or incompletely described). So unlike the Reductive Physicalist, the Non-Reductive Physicalist is saying that when neurons are configured x-like, something else comes along too – something not given merely by the physical parts arranged x-like. Return to the toolbox which the Physicalist helps themselves to. We cannot, using just those physical tools, build something up and point to it and say 'that is pain'. We build up our tower using the blocks in the toolbox, but that is not identical to the stuff we seek to explain. In virtue of being a Non-reductive Physicalist, one is saying that we cannot reduce the mental to just some particular (or general) physical structure. There's more to the story.

Both the reductive and Non-Reductive Physicalist claim that Physicalism is true. One says that the mental is reducible (identical) to some physical state, while the other says it is not. Now we need to ask, what is it for something to be fundamental? The Physicalist has been defined here as the one who claims that there is fundamentally just physical substances or properties. What is it to say that it is fundamental? The reason why someone claims that some thing is fundamental is because they think it cannot be reduced to any further constitutive components. Any attempt to give an

 $^{^1}$ This way of characterising notions of pain defuses objections against Reductive Physicalism based on considerations around multiple realisability. Some think that multiple realisability is a problem for Reductive Physicalism because it entails by its very meaning the existence of stuff that cannot be reduced to any particular physical state – for example, 'pain' cannot be reduced to a particular physical state. All the Reductive Physicalism needs to say in response is that 'pain' as something that is multiply realisable is only a word that we have invented to collect together things with some particular shared B-properties. This pain and that pain are not physically identical, but there are physical properties that are shared in common.

account of the thing through reduction will result in the loss of something important. If something is irreducible to anything else, then it is fundamental. However, this irreducibility claim is precisely what was said about the mental by the Non-Reductive Physicalist, and is the same as that which a Dualist claims. The fact that the Non-Reductive Physicalist claims that you cannot have the mental without the physical is irrelevant. We have here a claim by this Physicalist that the mental cannot be reduced to the physical without losing something in the process. This is, I think, just what we mean by 'fundamental'. If this is the claim of the purported 'Physicalist', then it would seem we have a case of Dualism: there are fundamentally physical substances or properties, and fundamental mental substances or properties.

If the Non-Reductive Physicalist is concerned about my characterisation of 'fundamental', then consider the above from a different angle. The primary appeal of Physicalism over rival theories is supposed to be its capacity to explain everything theories like these seek to explain, without requiring the insertion of extra things (e.g., mental properties) that cannot simply be derived from the fundamental components. Once the Non-Reductive Physicalist introduces mental properties as an irreducible addition to their theory, their brand of 'Physicalism' loses a significant advantage that Physicalist views were supposed to offer over rival theories. In this sense, the view is Dualist.

8.1.1 Physics and Physicalism

We will take a short detour into physics to approach the above argument from a different angle. Physics, as a crude characterisation, is the field that studies the more fundamental physical things in our universe (with higher level arrangements forming the focus of fields such as chemistry and biology). Before investigating the universe, physicists do not know what kinds of physics our universe will turn out to have. Physicists, then, need to be flexible enough to talk not only about the physics of our universe, but indeed the physics of other universes that are not like ours. That is to say, we have notions of what physical things there may be but are not. We may talk, for example, about universes that have no gravitational force, or that have an extra force that acts upon particular physical things. Mathematics provides us with the language we need to describe the structure of these universes – and hopefully one of the descriptions we put forward matches our universe.

Physics is described in many cases in terms of functions. In Quantum Physics we have wave functions which describe the states of particles as a function of position and time. The square of the absolute value of this function is another function, of position and time, and gives as an output the probability of a particle being at a particular position at a particular time. The gravitational force is also described with a function. This function takes

as inputs the masses of two objects, and the distances between those masses, and returns the gravitational force that each of those masses exerts on the other. There is also a function to calculate the distance travelled after a particular time under a constant acceleration. We have time and acceleration as inputs, and distance travelled over time. For physics in general, we deal with things like energy, force, position, time, velocity, acceleration, and so on. These things are the inputs and outputs of the functions that form our description of the physics of the universe.

Now, as a matter of current practice, there are no functions that are part of physics that include as either inputs or outputs anything that is mental. No equation telling us the quantity or quality of 'pain', given particular inputs involving energies, forces, positions, times, and so on. In terms of functions that are taken to describe the *fundamental* level of physics, this is as it should be. For the Reductive Physicalist, mental states are the same thing as some particular energies, forces, positions, times, and so on. For the Non-Reductive Physicalist, the mental is taken to not be identical to any of these things, so will not appear in these functions. No combinations of any of these inputs or outputs can be properly considered to be some mental state *except* as a case of identity.

Apart from giving descriptions in terms of functions, we can also describe states. For example, on a simplified model of some physics of some universe, we could talk about positions of particles as a function of time. At time t_1 , there are particles y_1 through y_n , and they each have positions p_1 through p_n . At time t_2 they have positions p_{n+1} through p_{2n} . And so on. In this way we describe the state of the world at each time, and then as a collection, the evolution of the states of the world.

Again, the Reductive Physicalist will say that the mental is just the same thing as some particular states, while the Non-Reductive Physicalist will say that the mental is not identical to some states, but nevertheless depends on some states. We then ask the Non-Reductive Physicalist to explain or account for mental facts without appeal to anything other than physical entities, and they cannot, because they cannot merely point to a state and identify it with some mental thing. The mental is something over and above the physical states, and as a result is not given by physics.

What is needed for the Non-Reductive Physicalist to complete their project is a bridge. For example, a bridge that states under what conditions the mental is produced, and what mental entities are produced. We might say then that such-and-such a state produces mental entity M. This is much like expanding physics with a new function, having mental things as outputs, as, for example, Integrated Information Theory might be interpreted as doing (Tononi et al. 2016). Remember that the Non-Reductive Physicalist wanted to say that the mental does not appear in the fundamental parts of physics. Yet, this solution is indistinguishable from the rest of physics that has the physical as inputs and outputs. That is, the mental

appears to be a fundamental part of physics here, an output of a function just like other physics functions. The mental plays the part of a fundamental entity, even if it is not given that label. This is just how Dualism has been characterised, with the mental appearing as a fundamental part of the world's ontology. The Reductive Physicalist is satisfied with physics only having functions which deal with energies, waves, velocities, and so forth, because the Reductive Physicalist takes some of these things to be just the same thing as mental things. The Non-Reductive Physicalist, on the other hand, is adding new entities to their ontology, and thus appears to be Dualistic. Since they do not identify the mental with any individual physical entities, or collections, then the mental must appear as a separate fundamental part of their ontology.

8.1.2 Dependence on the Physical

It is no response to say that the view is still Physicalist because it states that everything depends on the physical, in the sense that you cannot get the mental without the physical. We might interpret this defence as the claim that even if the mental is part of our toolbox, the view is still Physicalist because you cannot have the mental without it being at least in part grounded in the physical. For example, Lynne Rudder Baker (2009, p. 110) states that all Non-Reductive Materialists hold that "Mental properties depend on physical properties" (though, as Baker says, the 'depend on' part may be interpreted differently by different Non-Reductive Physicalists.

There are at least two things we may say here. First, even if the mental cannot occur without the physical, there is still something mental here in the fundamental part of this ontology. If that point is conceded, then the view is Dualistic in the way I care about, regardless of whether there are any actual instances (or possibilities) of the mental without the physical. Fundamental, in the sense I'm using it, doesn't mean 'can or does appear on its own'. Fundamental is about the irreducibility of it or a part of it to other constituent parts. There could be, for example, a property that only appears in combination with other properties, but cannot be itself reduced to other properties. The existence of such traits is enough for a view to be Dualist in a way that renders it less simple than rival Monist accounts.

Second, consider another view that is clearly Dualistic: there are neutral substances that cannot appear without both mental and physical properties. This is a view that says that you cannot have mental properties without physical properties, but you also cannot have physical properties without mental properties. This meets the requirement that the mental depend on the physical, but it also has the physical depending on the mental, and is clearly Dualistic. Claiming that you cannot have the mental without the physical is not enough to guarantee that your view is monistic.

It will not help to appeal to the asymmetric version of supervenience

either to claim some view is still Physicalist: that is, saying that while there can be no changes in the mental without changes in the physical, there can be changes in the physical without changes in the mental. Consider again a world with neutral substances that always have both mental and physical properties, but with this additional constraint: for every mental property, there are a pair of unique physical properties any one of which (and only one of these that) can be present in the same substance at a time, and no other physical properties. In such a world, you cannot change the mental without changing the physical (each new mental property is accompanied by one of two unique physical properties), but you can change the physical without changing the mental (to wit, swapping which of the two unique physical properties is possessed by the neutral substance). Again, this view appears wholly Dualistic, yet meets the proposed characterisation for being Physicalist.

If we insist that views like these are Physicalist merely because Physicalism seems to play a more important role at the fundamental level than the mental, then we have moved too far from the original intent of the term 'Physicalism'. Physicalism is no longer a claim about which substances or properties exist at the fundamental level, but is instead a claim about the physical playing some special role. And if that's the claim, then we'd need to develop some notion of 'specialness', and also explain why we should care about this particular specialness. The appeal of Physicalism is due to its promise to try and account for everything in terms of just the physical. It is this simplicity over certain rival theories that commends Physicalism to us. If we give up on this core desirable feature, what reason do we have left for favouring Physicalism over alternatives? For these reasons, when I compare Materialist Nouism to Physicalism, I am specifically comparing it to Reductive Physicalism, the truer Monist Physicalism. A true Monist Physicalist theory is a stronger rival for Materialist Nouism than any Dualist 'Physicalism'.

8.2 The Similarities

We now move on to the task of comparing (Reductive) Physicalism and (Materialist) Nouism. For the remainder of this chapter, I will sometimes refer to simply 'Physicalism' and 'Nouism'. If from the context it is unclear, assume that these are short-hand for 'Identity Physicalism' and 'Materialist Nouism'. Physicalist and Nouist views have fundamentally different foundations. What each view takes to be fundamental, the other takes to be derived from more fundamental foundations. As a result, we might have expected much to be changed at the level of our ordinary universe of trees, cars, and brains. That is, that these views would make some difference to our science. This may yet turn out to be true, but as things stand now,

there is in fact not much difference, if any, between the kinds of things that each view has to say about science, psychology, and the brain. Materialist Nouism as presented herein does so in a way that, by design, will leave the Nouist speaker saying much the same things as the Physicalist. This section deals with some of the similarities between each of Physicalism and Nouism when it comes to the topics of science, psychology, morality, and simplicity. It is my view that on each of these topics, there is less difference than may otherwise be supposed. Many of these points have been touched on already in chapters 4 and 5, but are included here for completeness.

8.2.1 Science

Both Physicalism and Nouism accept the existence of physical stuff, in the sense that has been outlined in Chapter 4. Where they differ is that Physicalism takes this physical stuff, or at least the underlying physical stuff from which other physical stuff is composed, to be instantiated – to have some existence on its own, independent of anything else, while Nouism takes this physical stuff to be translated into talk about blueprints in minds. If we set aside questions about the fundamental nature of the physical stuff, and focus instead on the kinds of sentences that will be spoken and assented to, then there is little difference between these two views when it comes to science.

Both views can talk about compositional physical objects like molecules, as well as more fundamental ones, whatever they turn out to be (fields, strings, and so forth). Consider, for example, electrons. They have charge and mass. Entities with charge will attract or repel each other, as will objects with mass. We can talk about these physical attributes without making any reference to whether this is talk about instantiated material things or blueprints. In fact, we can talk about what physics would be like were such and such to be the case, and not many of us think that in such discussions we are talking about real instantiated universes. There is some sense in which we can do all the work of science without supposing any kind of physical instantiation, nor without supposing that these must exist in a blueprint in God's mind.

Consider now a possible point of difference between these two views. Suppose we want to describe a two dimensional universe, a plane, which stretches out forever. Imagine it as a grid, and in each cell of the grid there sits a particle. There are a finite number of entities that roam the grid, and can remove and replace these particles as they traverse it.

Is such a universe possible, on each of Physicalism and Nouism? Some argue that you can't have *actual* infinities of particular sorts, infinities where at some particular point in time there is an actually infinite number of some things (Moreland and Craig 2003, p. 470-3). Does the above story entail that there is at least one point in time where there is an actually

infinite number of things? Consider this question on each of Physicalism and Nouism, stipulating that the above description is of the universe at its most fundamental level (for example, there is not some super-universe that is generating this universe as part of a simulation).

On the Physicalist view, this requires an actual infinite number of things, because each particle needs to be instantiated. The grid is infinite in size, with an infinite number of cells, and each cell contains a particle that can be moved. Each cell needs to be instantiated, and each particle, so we have an actual infinite number of particles.

On the Nouist view, it is not the same. There are no universes, but instead blueprints describing universes, and we can have finite descriptions of infinite things. I have, in the short space above, given a description of such a universe that took no more than a few words, the blueprint of which should be clearly understood (and if not, then we could make it clear enough after a short conversation). The universe might start off with one entity that can wander the plane, and the particles all in their original cells, a homogeneous landscape. The entity picks up one particle and carries it, and wanders away. The description is a little more complicated, because now I have to describe one cell as being empty, but the description is still finite. Suppose the being picks up another. The description becomes even more complicated, because I need to describe the absence of two particles, as well as their relative locations. As the being picks these up, the description becomes increasingly complicated, as the entropy of the system increases (unless the being acts in a way to keep the entropy at a minimum). As the being continues to remove particles, the description becomes more complicated but never infinitely complicated. On Nouism, there is only a blueprint, and the blueprint described just now is itself not infinite in any sense, though it describes a universe which, were it instantiated, would be infinite. It is not, on the Nouist view, actually infinite.

We can imagine possible universes which would require the blueprint to be infinite. Universes which are infinitely large, like the above, but the configuration of particles is of a complexity that defies any kind of finite description: where some localised compression of the description might be possible, but nothing that can be extended infinitely. If that were the physical universe, there would be a sense in which the blueprint itself is infinite as well. Thinking about the universe we take ourselves to be in, suppose that fields are infinitely divisible. Would that require a blueprint that is in some important sense infinitely divisible? I think not necessarily so. Suppose that we modify the above example so that the universe is not divided into cells, but is instead infinitely divisible. The particles are distributed across the field the same as before, equal minimum distances between them, arranged grid-like, and there are beings that wander across the field picking up particles and placing them somewhere else. Where these beings place the particles could be anywhere that is not already occupied (suppose they

are point-sized), limited only to real numbered positions. Suppose they pick up their first particle and displace it. We now have to complicate our description to say not only the default layout of the universe, but also that particle A has been displaced and is now found at the real coordinates (x, y). Our description here is still finite, and we have no reason to think that the blueprint itself could not also be similarly finite. The universe might be infinite in terms of how far it extends, and also in terms of how divisible it is, but neither of these are enough to guarantee that the blueprint must be infinite in some important sense too. To have a blueprint that is infinite in some important sense, one sufficient condition is to find those universes which cannot be given some complete finite description – a blueprint of such a universe would likely be infinite.

If we take seriously the claim that there cannot be an actual infinity, then this is a point of difference between the two views, but not a significant one. It just reduces the scope of possible universes on Physicalism to fewer than are possible on Nouism, which is no failure of the theory. It is an open question whether our universe involves an actually infinite number of things, and it is also a contested point as to whether it is a problem for there to be an actually infinite number of things. These considerations also don't rule out the possibility of a similar universe to the one described above being constructed on a Physicalist view. For example, consider a universe in which there are an ever increasing number of universes, though never an infinite number. Within these universes are beings that have created computer simulations of the above infinitely sized flat universe. At any given moment, a finite amount of computing resources are required to simulate that universe, but as the entropy increases within that simulated universe, so does the computing resources required. However, these creators control the speed of the simulation, and they can expand their computing power as the number of universes increases, thus allowing them to simulate that flat universe eventually, at any given size and entropy level. In effect, such a universe is possible on a Physicalist view as something that exists on top of a finite universe, though not itself as the fundamental layer of the universe with an actual infinite number of particles (if we think an actual infinity of this sort is not possible).

8.2.2 Psychological States and the Brain

When we consider the role of the brain, and psychological states, the Nouism developed in this thesis does not stray very far at all from the kinds of things that a Physicalist might want to say about psychological states and the brain. Consider a stronger characterisation of the psychological supervenience claim (Kim 1982, p. 53):

All psychological states and processes supervene on the contem-

poraneous physical states of the organism

When 'psychological' is understood to be the what-it's-like, then some form of this doctrine can be accepted by the Nouist. All of the what-it'slikenesses come from God, and God uses facts about, say, 'contemporaneous physical states of the organism' to determine what experiences are had. Even though physical states are ultimately grounded in mental states, there can be no changes in psychological states without changes in physical states. This is not just a contingent fact, but rather it is not possible for there to be a change in psychological states without changes in physical states. The Nouism of this thesis has experiences, phenomenal impressions by one mind upon another, as the only way for minds to communicate. Any experience needs behind it some blueprint that provides the basis for why that experience was given and not some other. That underlying blueprint is what plays the role of the physical in the Nouist view. There can be no changes in the impressions without changes in the underlying blueprint that form the basis of the impression. For the Physicalist, the story is the same: there can be no changes in the kinds of experiences I have without changes in the underlying physical universe.

If, however, 'psychological' is to be understood as everything that might be characterised as mental, then the above doctrine cannot be accepted by the Nouist. However, there is no reason to suspect that proponents of this theory would intend to include such things. On the typical Physicalist view, there are no minds that exist independent of a physical substrate, and certainly no mental contents or operations that are unfelt and also Non-physical. We can therefore agree with the Physicalist who says things such as memories, likes and dislikes, desires, and so on, supervene (in some sense) on the physical, and agree with them on what kinds of physical things they supervene on, and yet still insist that the physical ultimately reduces to the mental.

Unlike a typical Cartesian Dualist, a Nouist of this sort will expect most psychological traits to have some neurological (or related physical) basis. Memories are recorded in the brain, mental illnesses of various sorts have a neurological basis, and, in general, changes to the brain are able to produce changes in experiences.

8.2.3 Simplicity and Commitments

One might wonder how minds work, how they send things, what is the mechanism, etc? It might seem entirely mysterious what it is they do and how. I think it is right to say that there is much unexplained here, but physicalism is no better: it postulates physical stuff and gives it powers, with an end to explanations there. Once we get to the fundamental level, there is a need to postulate some stuff that has particular powers with no

explanation of how those powers work, their mechanism, etc – if there were such an explanation, then we could ask the same questions about the details now just offered. When the chain has an end, so too do our Nouist or Physicalist explanations.

When comparing views that seem to be on a par in most ways, one way we can differentiate them is to see if one involves commitments that the other does not, and not vice versa. If Nouism turns out to require more commitments than Physicalism, but Physicalism does not require any commitments over Nouism, then this is a point in favour of Physicalism. If both involve commitments that the other lacks, then it is much harder to compare.

Do we find this to be the case? Graham Oppy (2017) argues that Identity Physicalism (he uses the term 'Naturalism' in place of Physicalism) does indeed have fewer commitments than the kind of Nouism I propose herein (which he calls 'Idealism'), without itself requiring any commitments that Nouism lacks. This may be right, but we will discuss some of his reasons in turn to see why I think that this not obviously so, or at least not a significant point against Nouism when we count up the virtues. He writes (ibid., p. 58):

First, let's consider the ontology of the two positions. On the one hand, Naturalist is committed to the denizens of the universeminded organisms, sofas, sculptures, cars, cities, rivers, planets, stars, and so on-and to nothing else. On the other hand, Idealist is committed to all of the denizens of the universeminded organisms, sofas, sculptures, cars, cities, rivers, planets, stars, and so on—as well as to a supernatural mind, to minds for all minded organisms, and (perhaps) to 'contents' in all of the minds... Naturalist and Idealist agree on the existence of minded organisms, sofas, sculptures, cars, cities, rivers, planets, stars, and so on. So, on point of ontological commitment, Naturalist is a clear winner: Idealist is committed to all of the ontology to which Naturalist is committed, and more besides.

It is true to say that there are existence claims that we can make that are true on Nouism that are not true given Physicalism. However, it is unclear to me that there are not equivalent existence claims that turn out true on Physicalism that are not true on Nouism. To see why, let us distinguish between four different levels of ontology, to see how each of Nouism and Physicalism differ at each point.

First, let us distinguish theories by the number of types of fundamental stuff they posit. The claim of the Materialist Nouist is, grant me just minds and I can show you how we can derive everything else. The claim of the Physicalist is, grant me just physical objects and I can show you how we can derive everything else. For the Materialist Nouist, at the fundamental level

we have just minds and their powers. For the Physicalist, at the fundamental level we have just physical objects and their powers. That is all. Each view postulates a single type of stuff with powers, and no more. This gives Nouism and Physicalism each a distinct parsimony advantage over Dualism, but none over each other.

Second, let us distinguish theories by the number of types of types of fundamental stuff. We have mental stuff, but how many different types of mental stuff are there? Is there just a single type of mind? Or are there different types of minds, with fundamentally different powers? On some accounts there might just be one, but on some other accounts we might distinguish between God's mind and the satellite minds, attributing different powers to each. This gives us at least two types of mental stuff. On Physicalism, similar questions arise. Is there fundamentally just one type of Physical stuff, a single field that accounts for all of the universe? Or are there different types of fields? Are there instead strings? Or fundamentally different types of particles that cannot be reduced to something else? On Physicalism, there might be just one type of fundamental physical stuff, or there might be many. These are open questions, and neither view so far has an advantage over the other here.

Third, let us distinguish theories by the number of tokens of the types of types of fundamental stuff. Whether there is just one type of mind or many, how many actual minds are there? There may be just God, or God and the satellite minds. There may be as many satellite minds as there are human bodies, or as many as there are particles or fields or strings. Whether there's just one type of field or many, how many actual fields are there? There might be just one field or many. If particles are the fundamental type, there may be many particles. It is an open question how many tokens of the fundamental types there are, and on different views there are different counts. It is not obvious that there are fewer such tokens on the Materialist Nouist view of this thesis, or the Identity Physicalism we have been considering. Neither view currently has an advantage over the other here.

Finally, let us distinguish theories by the number of ultimate denizens. We are here talking about the kinds of denizens considered by Oppy above. Sofas, sculptures, cars, supernatural mind, minds, and so forth. Sofas, sculptures, and cars are not fundamental types or even tokens of the fundamental types on either view. They are derived denizens, either calculated from the fundamental tokens on Nouism, or compositions of fundamental tokens on Physicalism. To add to the difficulty, denizens like sofas are human terms. There are terms we could coin for many other compositions that currently have no label. We may refer to the composition of a sofa plus floor as a sflorfa. Our ontology has not now inflated by virtue of coining a new term to refer to a collection of more fundamental tokens as a group. These denizens are calculated or derived, and not fundamental themselves. Are there more such derivable denizens on Nouism than Physicalism? This isn't

obvious. Since we're talking about derived or calculated objects, it is hard to know where to draw the line. While it is true that there are no supernatural minds on Physicalism, it is not obvious that we cannot make other existence claims for Physicalism that find no counterparts on Nouism. Furthermore, while there are different claims that can be made, on each view there are an infinite number of denizens to be found, since we are talking about that which can be derived. We could create labels for things tied to natural numbers (e.g., a name for sofas that do not have exactly one floral image, or exactly two, etc, or tied to moments in time, such as a name for a particle or cluster of particles at each particular time, etc). Given that we are talking about derived or calculated denizens, how are we to count or weigh the infinite number of denizens on each view? Someone may insist that we should consider only actual things, but remember that the actual things are those that appear on the first three levels, not the final level. On the previous levels, there was no advantage to be found for either theory. What we are left with are the kinds of true existence claims we might make on each view, and again there is no obvious advantage to be gained by one theory over the other.

Even if we were to find that one view has a simplicity advantage over the other at one of these levels, I find that my intuition about how important of an advantage this is reduces drastically as we go up each level. David Lewis (1973, p. 87) distinguishes between simplicity (parsimony) of types and simplicity of tokens, and says, "I subscribe to the general view that qualitative parsimony is good in a philosophical or empirical hypothesis; but I recognize no presumption whatever in favor of quantitative parsimony". In the right circumstances, this seems correct to me. When I think about theories about how, say, someone came to be murdered, I find quantitative parsimony to be important. Within the physical world, there are good reasons to think that simple circumstances leading to some event are more common than more complex circumstances leading to the same event. There will be good reasons in thinking this is so, relating to the kind of physical world we are in. However, when it comes to certain types of views like Nouism and Physicalism, I see little or no points to be gained by postulating, say, fewer tokens of the fundamental substances (e.g., fewer minds than physical objects), or having fewer entities derived from the fundamental tokens (e.g., denying there are any supernatural minds). Reasons that we have for favouring quantitative simplicity regarding events within the physical world do not apply straightforwardly to theories that are about explaining the physical world itself. Here, at the last two levels involving quantitative parsimony, it seems to me a wash between Nouism and Physicalism, even if we were to find some quantitative difference.

8.3 The Differences

Having looked at some of the similarities, it is now time to consider some of the differences in terms of theoretic virtues. To announce what is ahead, I think that Nouism has an advantage when it comes to giving an explanation for everything, but a disadvantage when it comes to explaining the birth of minds and their link to human bodies.

8.3.1 Accounting for the Other Substance

When it comes to how each of Physicalism and Nouism account for the 'other' substance – Physicalism accounting for the mental, and Nouism accounting for the physical – I think that we come to the most compelling reason to favour a Nouist account. The core points here have been touched on already in preceding chapters, and so the following is a quick outline, included here to complete the brief comparison of the two views.

Dealing with the Physical

A great deal of this thesis has been dedicated to showing how we might account for the physical given just mental substances. All of that which we identify as the physical comes from two components: a blueprint in a mind, and the impressions that mind gives to another mind on the basis of that blueprint. This gives us the underlying blueprint of the physical, as well as an account of the appearance of the physical that differs from the blueprint. We have an explanation for why there are experiences of being in a physical world, and all the details of those experiences. There is nothing left unexplained, no need to postulate the existence of some mind-independent matter in a physical universe.

Dealing with the Mental

There is, I think, a significant difference between the Nouist and the Physicalist in their ability to complete their project in a satisfactory way. The Identity Physicalist offers this account of the mental: particular pains are to be identified with particular neural firings. If you want to know what your pain is, it is this particular firing of neurons. What else is there to say? If the Identity Physicalist is right, then our project is done. The problem is that, for many, there is a strong intuition that neural firings just cannot be identical to experiences. In brief, the phenomenal side of being a minded creature does not appear to be at all explainable in terms of the Physical. A stipulation that certain physical events, states, processes, objects, or other, are identical to the mental seems unfounded and lacking any kind of insight or explanation to remove our concerns. My experience as of seeing a red ball, a tree, and so on, is not accounted for at all in terms of, say, neurons

firing. When looking for an explanation or a way of understanding how neurons firing might at all explain the phenomenal, there is nothing more than a promise, or a stipulation, that the one accounts for the other. With Nouism, I have gone into great detail explaining how it is that the two primary parts of the physical – its structure (as a blueprint) and appearances - can both be accounted for given the mental. I see no explanation for this on Identity Physicalism. No way to recover the phenomenal from the kinds of entities given in physics. No way to make sense of the idea that neural firings are somehow identical to pains This, I think, is the strongest reason to prefer Nouism over Physicalism. Unlike the Identity Physicalist, The Materialist Nouist doesn't tell us that physical stuff is identical to particular mental stuff. Rather, the Materialist Nouist tells us that the physical world is as 'illusion' of sorts, something to be explained away rather than identified. This is a key point of difference, where it seems to me the Materialist Nouist can offer a compelling explanation precisely because they don't try to identify the physical with the mental. Of course, criticisms of these sorts are nothing more than pointers to well-worn arguments for a so-called hard problem of consciousness, something I will not go into here in detail, having been covered exhaustively by many others elsewhere. The short of it is: there is a hard problem of consciousness for the Physicalist, but no analogous hard problem of non-consciousness for the Nouist.

8.3.2 The Birth of a Mind

When is a mind created or attached to some physical body? This is, I think, one of the weakest parts of the particular Nouism proposed in this thesis. We have a universe, the blueprint of which is contained in God's mind, and experiences of which are had by us via impressions from God. Exactly which impressions a mind has of that universe depend on decisions made by God, including a decision about which parts of the blueprint of the universe it is that the mind has experiences of – in a sense, what part of the physical sits at the interface between the mind and the blueprint (for Descartes, for example, it was the pineal gland (Lokhorst 2013)).

On this view, minds are in themselves entirely distinct from the blueprint in God's mind, and so too is the blueprint in God's mind entirely distinct from any minds. The only connections are ones that God decides upon and enforces at every moment. So then, when a human is born, this is entirely distinct from the birth of a satellite mind. Minds may be born without bodies (that is, without God giving them any impressions of the physical world he has in mind), and bodies may be born without minds. So then, at the birth of a child, for us to suppose that there is a mind behind that human child, we must suppose that God not only creates a mind at some point, but then decides and enforces a link between that human child and that newly born mind.

This seems, to me, is an unsatisfactory state of affairs. It renders us completely helpless in addressing questions such as whether or not AI has a mind behind it with moral worth, whether or not animals do, and more generally, which are the physical interactions that God responds to by creating a mind and linking it to a human body? For example, if a child is created via IVF and incubated entirely in a machine, will God create a mind? What if one is one day a human is synthetically created from raw materials with an advanced human-printing 3D printer? What if we make variations on the design, making the creature we are going to print more and more like a couch and less and less like a human - where is the boundary after which God will not create a mind? Answering such a question seems intractable. Moreover, Physicalists have a neat answer. Creatures are conscious insofar as they (for example) have the right kinds of brain processes (or play the right kind of functional role, etc). This answer admits to degrees, and so when imagining some intermediary forms between a human to a couch, what changes is the degree of conscious life. There is no mind as a separate component to keep track of. There are just these physical processes which are identical to, or are entirely responsible for producing, experiences – and that's it. Nouism adds an extra layer of metaphysics which in this particular instance confuses matters.

Keith Campbell (1984, p.43) highlights a related problem for Substance Dualists:

How can a Non-spatial thing enter exclusive and intimate relations with just one body and no other? Take the case of two bodies which are thoroughly alike; identical twins just before birth. Suppose that from the time of the first division their development has proceeded exactly parallel. They now differ only in position and physical attitude, so their only differences are spatial. Yet already (or soon after) each body must be associated with its own mind. If these minds are Non-spatial spirits, how can they "take advantage" of the merely spatial differences between the twins' bodies and become associated with just one of them? It will be hard for any Dualist to furnish a convincing account of such a situation.

And later (pp. 48-9),

Evolutionary theory asserts that complex modern forms, such as man, are the remote descendants of earlier species so much simpler that like the amoeba they show no signs of mental life. If minds are spirits they must have arrived as quite novel objects in the universe, some time between then and now. But when? We see only a smooth development in the fossil record. Any

choice of time as the moment at which spirit first emerged seems hopelessly arbitrary.

In the embryonic development of man, the same problem arises. The initial fertilized cell shows no more mentality than an amoeba. By a smooth process of division and specialization the embryo grows into an infant. The infant has a mind, but at what point in its development are we to locate the acquisition of a spirit? As before, any choice is dauntingly arbitrary.

This is, I think, a very serious problem for the Materialist Nouism described so far. Let us consider three different things the Nouist might do

- 1. Accept it
- 2. Embrace Singularism
- 3. Embrace Pluralism Plus

We'll look at each in turn.

Accept It

While this is a concerning feature of the view, it is not strictly a contradiction. It does present us with epistemic problems – for example, knowing when a mind is born and 'plugged in' – but epistemic problems are not new. Indeed, in Quantum Physics there are either indeterminate events (Copenhagen interpretation), or determinate events which are provably unknowable (Hidden Variable interpretations) (Albert 1992). Either way, we are in an inescapably impoverished epistemic situation. While concerning, if that's the way the world is, the birth of minds is no problem serious enough to warrant abandoning the view.

This response, while correct in its details, is unsatisfactory. And even if it is not a problem on the level of a contradiction, if there are rival theories that provide better explanations here and aren't obviously worse in other ways, that does in fact give us a reason to abandon this particular Nouist view.

Though the birth of the mind, and in general how it is a mind comes to be attached to some particular brain and no other, is a strange and anomalous characteristic of Pluralist Nouism, it does have its modern analogies. In a video game, for example, there is often little difference between the characters played by humans and those played by the computers, except how they are controlled. Video games are able to track which individual character is controlled by which particular player, and we may suppose that minds being attached to particular bodies in our universe is somewhat analogous. Minds are created and become linked to human bodies by God, at just the right

times under just the right circumstances. It is very strange, yes, and raises difficult questions, but it is not impossible, not a contradiction of any sort.

Embrace Singularism

Suppose that we say that there is just one mind, and that my experiences as of being a human in a universe are just that single mind experiencing the blueprint from a particular perspective – my perspective. And indeed, for any perspective that there might be, the one and only mind that there is is experiencing the universe from that perspective. This gives us a single mind, but a multitude of experiences. It is, in effect, an explanation that is for all intents and purposes on a par with the Physicalist's response. The Physicalist says that we have the right kinds of interactions or physical processes, and that just is (or produces) conscious experiences. So too on the Singularist view, different processes involve different perspectives that are experienced. For all the same kinds of scenarios that the Physicalist says that there are experiences, so too does the Singularist – those experiences are all just had by one mind. In this case there is no problem about the birth of a mind. If there is the perspective, there is the one same mind having experiences as of that perspective.

Here's one reason we might be concerned with Singularist Nouism. Suppose that there is just God, experiencing all the different perspectives. If there are no other minds, then what reason would God have for limiting the universe to one like ours, where we live in a universe that's around 14 billion years old, stable physical laws (or powers), and so on? There are many perspectives to be experienced, and it is cleaner or simpler to suppose that God would experience every possible perspective. Why experience being John in our universe alone, and not also John in a universe that's identical to ours up until this point, after which the laws (or powers) change? The simplicity of the Singularist view is in the fact that every perspective is experienced. Rather than limiting this to every perspective in the kind of universe we take ourselves to be in, why not stretch it to every possible perspective in every possible universe?

If this point is accepted (and I admit it is not a strong one), then our evidence does not back it up. But first, here's one objection to Singularism that doesn't work. Consider a universe like ours, one in which the laws (or powers) are stable, the same across time. There's just one way for them to remain the same, but many ways for them to break down in catastrophic ways that lead to the death of all life. In other words, an overwhelming majority of perspectives, we might say, involve life in the universe ending in the next moment, t_1 . Yet we do not observe the universe ending at t_1 , so our evidence contradicts, or so it would seem. Now, while this is a tempting line of reasoning, it doesn't work – if we suppose that such observers do exist, then they will cease to observe at t_1 . Only those observers who are in

the universes that are stable after t_1 continue having observations. There is an observational selection effect that neatly explains why we do not observe the universe ending.

However, this does not preclude other predictions that raise problems for Singularism. There might be universes in which the laws cease being stable, but in ways that are not destructive to life. There are many ways that the laws can become unstable. There could be regions of the earth where the laws operate differently. Such regions would be very obvious, and should be detectable, yet it seems that our universe has physical laws (or powers) that are the same everywhere. Variations in the laws over regions is not the only possible way in which our universe could fail to have the same laws everywhere. We could also have variations in the laws over time (Davies 2007, p. 492):

To take a simple example, consider the law of conservation of electric charge. The charge on the electron could happily fluctuate by, say, one part in 10⁶ without disrupting biochemistry. In fact, measurement of the anomalous magnetic moment of the electron fixes the electric charge to eleven significant figures – a stability far in excess of that needed to ensure the viability of living organisms. So either the electric charge is fixed by a law of nature, in which case the multiverse cannot be invoked to explain this particular aspect of cosmic order, or there is some deep linkage between the charge on the electron and some aspect of physics upon which the existence of life depends far more sensitively. But it is hard to see what this might be."

Our experiential evidence doesn't back up the claim that every observation is occurring. Of course, there are difficulties that accompany treatments of multiverses of various sorts and their observational selection effects. However, I think there is something to the considerations above that give us a reason to question the advantages of Singularism.

Pluralist Nouism doesn't have the above problem. With satellite minds, the purpose of the universe is no longer to allow God to experience each perspective, but rather to allow minds to communicate (and, if we weaken the rule to make minds more Cartesian, then also to allow minds to relate). And in order to facilitate communication, that requires some stability and some power over that universe. If everything that's possible happens, then there is in an important sense no information, no communication. In order to communicate, there should be many paths, only some of which are travelled. If every path is travelled, nothing is communicated. Suppose you ask me to join you for dinner tonight. I say, "I will join you", and "I will not join you", and "I will join you late", and "I will join you early", "I will drop in for a minute and then leave", and so on. I enumerate all the possible actions

I may take, and in doing so tell you nothing about what I will do. When everything is said or done, nothing is communicated.

Pluralist Nouism states that the universe exists in order to allow minds to communicate. And to allow effective communication, there should be a universe which the satellite minds can take one among many available paths. A universe like we suppose ourselves to be in, one in which not every possibility is played out, is precisely the kind of universe that Pluralist Nouism requires. And so while Singularism may have its advantage in one place, Pluralist Nouism has it in another.

Pluralism Plus

Rather than reduce the number of minds to just a single one, we can increase them to the extreme. One option is to take Leibniz' approach in the Monadology, where there are as many minds as there are perspectives (Leibniz 1714/2012) This is much like the Singularist approach, except rather than having the same mind behind each perspective, there are as many minds as there are perspectives. Here again the solution is neat (if not excessive), giving us consciousnesses everywhere that the Physicalist does, and provides some traction on how to reason about minds and experiences. However, the same concerns about God playing out every possibility may yet arise for a view like Leibniz'. Monads do not exist to communicate or act in a way that involves choosing one path from among many – and indeed, Monads do not communicate at all, for they "have no windows, through which anything could come in or go out" (ibid., §7). Rather, God creates each Monad as a whole self contained, with a consistency between their perspectives. God creates "as great variety as possible, along with the greatest possible order; that is to say, it is the way to get as much perfection as possible" (ibid., §58). The Monads may offer a solution of sorts to the problem, but we will set them aside, noting that there may be similar concerns with postulating Monads as a solution as there was for the Singularist Nouist.

Another Pluralism Plus approach is the Nouism of Donald Hoffman, introduced in 7.1.3. Here reality is made up of just consciousnesses, and these consciousnesses combine to create higher level consciousnesses much like we associate with, say, a human (Hoffman and Prakash 2014). The consciousness of a human is made up of lower level consciousnesses, and we might suppose that this gives us an answer to the problem faced by the Nouism of this thesis – that is, that simple AI, or other organisms, are consciousnesses too, albeit much simpler ones in just the way we'd expect. They are likewise combinations of lower level consciousnesses, but not as many and in not as complicated ways, thus giving an account of the richness of conscious life in a human against that of lower 'level' organisms.

Hoffman's view comes with its own troubles, though admittedly not insurmountable problems. Hoffman claims his view is a realism about minds in a way that makes it a Nouist view — minds are an assumption of the system, irreducible. Yet in his paper with Chetan Prakash, they provide a definition of consciousness and use it in a way that suggests minds are in fact reducible. They define consciousness in a particular way, and then show that consciousnesses combined in the right ways will also meet this definition, and thus be consciousnesses themselves. By treating consciousnesses as reducible in this sense, the view fails to be Nouist. By insisting on minds being irreducible and fundamental, there is no guarantee, merely in virtue of meeting the conditions of the definition provided, that combinations of consciousnesses are themselves consciousnesses. Of course, if there is no guarantee that such combinations are conscious, this doesn't entail that they are not conscious. And so Hoffman's view may indeed be a way to provide a neater solution to this particular problem, just without being able to appeal to his clever (but ultimately failed) proof to show that combinations of consciousnesses are themselves consciousnesses.

8.4 Final Remarks

This thesis has been an attempt to provide a modern Nouist account, a *Materialist* Nouism, that does not suffer from the kinds of troubles that a Nouism like Berkeley's has. It is a Nouism that differentiates between experiences and the underlying reason why there is an experience of that sort and not some other, a reason (beyond God's free choosing) that is itself not identical to the experience. From that modification to a Nouism like Berkeley's, we lose Berkeley's ability to respond to the sceptical worry, but gain so much more in return. We have a Nouism that is able to explain most (if not all) of what we need such views to explain, without suffering from a problem analogous to the hard problem of consciousness. As a result, I have become convinced that on a point-by-point comparison a Materialist Nouism Physicalism matches Identity Physicalism almost everywhere we would care to compare, while being stronger in its ability to account for the 'other stuff'.

However, what we have seen here is just one sketch of many possible Nouist views. Physicalism claims (very crudely put) that there is just the physical universe, and so its claims about what exists are constrained in some ways by the kinds of things physicists uncover. The Nouist, on the other hand, postulates entities that are not accessible by science, and so has a much wider variety of epistemically possible views to countenance. This weakness is where further work should be done, considering whether there are reasons to restrict the playing field of views, and what considerations would apply.

Besides considering and finding ways to rule out alternative Nouist views, there are many other topics to consider in more (or some) detail: morality, scepticism, freedom, modality, impressions of experience as a means for communication, weakening the simple rule, interaction with theologies, and much more. Nouist and Physicalist views are the sorts of views that end up touching on a great deal of philosophy because they lie at such a foundational level of or world view. This is only the beginning of a project of mentalising philosophy.

Bibliography

- Adams, Robert M (2007). "Idealism Vindicated". In: *Persons: Human and Divine*. Ed. by Peter van Inwagen and Dean Zimmerman. Oxford University Press, pp. 35–54.
- Albert, David (1992). Quantum Mechanics and Experience. Kindle. Harvard University Press.
- Albert, David and Rivka Galchen (2009). "A Quantum Threat". In: Scientific American, pp. 32–39.
- Baker, Lynne Rudder (2009). "Non-Reductive Materialism". In: *The Oxford Handbook of Philosophy of Mind*. Ed. by Brian McLaughlin, Ansgar Beckermann, and Sven Walter. Oxford: Oxford University Press. Chap. 6, pp. 109–27.
- Bayne, Tim and Michelle Montague (2011). "Cognitive Phenomenology: An Introduction". In: *Cognitive Phenomenology*. Ed. by Tim Bayne and Michelle Montague. Oxford Scholarship Online.
- Benacerraf, Paul (1973). "Mathematical truth". In: The Journal of Philosophy 70.19, pp. 661–679.
- Berkeley, George (1710/1713/1988). Principles of Human Knowledge/Three Dialoques. London, England: Penguin Books.
- Bourget, David and Angela Mendelovici (2016). *Phenomenal Intentionality*. Stanford Encyclopedia of Philosophy. URL: https://plato.stanford.edu/entries/phenomenal-intentionality/ (visited on 08/15/2017).
- Bracken, Harry M. (1965). The Early Reception of Berkeley's Immaterialism 1710-1733. Revised Ed. The Hague: Martinus Nijhoff.
- Braddon-Mitchell, David (2007). "Against Ontologically Emergent Consciousness". In: *Contemporary Debates in Philosophy of Mind*. Ed. by Brian P Mclaughlin and Jonathan Cohen, pp. 287–99.
- Brentano, Franz (1874/1973). Psychology from an Empirical Standpoint. London, England: Routledge and Kegan Paul.
- Campbell, Keith (1984). *Body and Mind*. Notre Dame: University of Notre Dame Press.
- Chalmers, David J (1996). The Conscious Mind: In Search of a Fundamental Theory. New York: Oxford University Press.
- Chalmers, David J and David Bourget (2014). "What Do Philosophers Believe?" In: *Philosophical Studies* 170.3, pp. 465–500.

Child, William (2011). "Wittgenstein on The First Person". In: *The Oxford Handbook of Wittgenstein*. Ed. by Oskari Kuusela and Marie McGinn. Oxford University Press.

- Davies, Paul (2007). "Universes galore: where will it all end?" In: *Universe or Multiverse?* Ed. by Bernard Carr. Cambridge: Cambridge University Press, pp. 487–506.
- Dennett, Daniel C. (1992). "Quining Qualia". In: Consciousness in Modern Science. Ed. by A. J. Marcel and E Bisiach. Oxford Scholarship Online.
- Descartes, René (1641/1996). *Meditations on First Philosophy*. Ed. by John Cottingham. Cambridge: Cambridge University Press.
- Dicker, Georges (2011). Berkeley's Idealism: A Critical Examination. Oxford Scholarship Online.
- Evans, Gareth (1982). *The Varieties of Reference*. Ed. by John McDowell. New York: Oxford University Press.
- Fields, Keota (2018). "Berkeley's Semiotic Idealism". In: *Berkeley's Three Dialogues: New Essays*. Ed. by Stefan Storrie. Oxford Scholarship Online, pp. 61–83.
- Flint, Thomas (2012). Divine Providence. The Molinist Account. Cornell Studies in the Philosophy of Religion. New York: Cornell University Press.
- Foster, John (2008). A World For Us. The Case for Phenomenalistic Idealism. New York: Oxford University Press.
- Frankel, Melissa (2016). "Berkeley on the "Twofold state of things"". In: *International Journal for Philosophy of Religion* 80.1, pp. 43–60.
- Frankfurt, H G (1969). "Alternate possibilities and moral responsibility". In: *The Journal of Philosophy* 66.23, pp. 829–839.
- Fritz, Anita D. (1954). "Berkeley's Self Its Origin in Malebranche". In: *Journal of the History of Ideas* 15.4, pp. 554–572.
- Gallagher, Shaun (2012). "First-Person Perspective and Immunity to Error Through Misidentification". In: *Consciousness and Subjectivity*. Ed. by Sofia Miguens and Gerhard Preyer. Philosophical Analysis. De Gruyter, pp. 187–214.
- Goodman, Nelson (1976). Languages of Art. An Approach to a Theory of Symbols. Indianapolis, IN: Hackett Publishing Company, Inc.
- Guyer, Paul and Rolf-Peter Horstmann (2015). *Idealism*. Stanford Encyclopedia of Philosophy. URL: https://plato.stanford.edu/entries/idealism/(visited on 04/06/2016).
- Habermas, Gary R and J. P. Moreland (1998). Beyond Death: Exploring the Evidence for Immortality. Oregon: Wipf and Stock Publishers.
- Hoffman, Donald D. and Chetan Prakash (2014). "Objects of consciousness". In: Frontiers in Psychology 5, pp. 1–22.
- Hohwy, Jakob (2016). "The self-evidencing brain". In: $Nous~50.2, \, \mathrm{pp.}~259-285.$

van Inwagen, Peter (1983). An Essay On Free Will. New York: Oxford University Press.

- Kahane, Guy (2011). "Evolutionary Debunking Arguments". In: *Nous* 45.1, pp. 103–125.
- Kant, Immanuel (1781/1998). Critique of Pure Reason. Ed. by Paul Guyer and Allen W. Wood. The Cambridge Edition of the Works of Immanuel Kant. Cambridge: Cambridge University Press.
- Kim, Jaegwon (1982). "Psychophysical Supervenience". In: *Philosophical Studies: An International Journal for Philosophy in the Analytic Tradition* 41.1, pp. 51–70.
- Lau, Joe and Max Deutsch (2014). Externalism About Mental Content. URL: https://plato.stanford.edu/entries/content-externalism/ (visited on 02/20/2019).
- Leibniz, Gottfried W. (1714/2012). *The Monadology*. Kindle. Acheron Press. Lewis, David (1973). *Counterfactuals*. Malden, MA: Blackwell Publishing.
- (1995). "Should a materialist believe in qualia?" In: Australasian Journal of Philosophy 73.1, pp. 140–144.
- Lokhorst, Gert-Jan (2013). Descartes and the Pineal Gland. Stanford Encyclopedia of Philosophy. URL: https://plato.stanford.edu/entries/pineal-gland/ (visited on 02/21/2019).
- Markosian, Ned (2014). *Time*. Stanford Encyclopedia of Philosophy. URL: https://plato.stanford.edu/entries/time (visited on 01/30/2018).
- Maudlin, Tim (2014). "What Bell Did". In: Journal of Physics A: Mathematical and Theoretical 47, pp. 1–24.
- McKenna, Michael and D. J. Coates (2015). Compatibilism. Stanford Encyclopedia of Philosophy. URL: https://plato.stanford.edu/entries/compatibilism (visited on 02/21/2017).
- Moreland, J. P. and William Lane Craig (2003). *Philosophical Foundations For A Christian Worldview*. Downers Grove, IL: InterVarsity Press.
- Nichols, Shaun and Michael Bruno (2010). "Intuitions about personal identity: An empirical study". In: *Philosophical Psychology* 23.3, pp. 293–312.
- Olson, Eric T. (2015). *Personal Identity*. Stanford Encyclopedia of Philosophy. URL: https://plato.stanford.edu/entries/identity-personal (visited on 02/14/2017).
- Oppy, Graham (2017). "Against Idealism". In: *Idealism: New Essays in Metaphysics*. Ed. by Tyron Goldschmidt and Kenneth L. Pearce. Oxford Scholarship Online. Chap. 4.
- Papineau, David (2015). *Naturalism*. Stanford Encyclopedia of Philosophy. URL: https://plato.stanford.edu/entries/naturalism/ (visited on 06/15/2018).
- Peirce, Charles Sanders (1935). Collected Papers of Charles Sanders Peirce. Ed. by Charles Hartshorne and Paul Weiss. Cambridge, MA: The Belknap Press of Harvard University Press.

Pitt, David (2004). "The Phenomenology of Cognition Or What Is It Like to Think That P?" In: Philosophy and Phenomenological Research 69.1, pp. 1–36.

- Plantinga, Alvin (2012). "The Evolutionary Argument Against Naturalism". In: Where the Conflict Really Lies. Oxford Scholarship Online.
- Pruss, Alexander R (2006). "Quantum Mechanics". In: *The Principle of Sufficient Reason*. Cambridge University Press. Chap. 8, pp. 160–170.
- Putnam, Hilary (1999). *The Threefold Cord*. New York: Columbia University Press.
- Rachels, Stuart (1998). "Counterexamples to the transitivity of better than". In: Australasian Journal of Philosophy 76.1, pp. 71–83.
- Rand, Benjamin (1914). Berkeley and Percival. Cambridge: Cambridge University Press.
- Redding, Paul (2009). Continental Idealism: Leibniz to Nietzsche. Abingdon, Oxon: Routledge.
- Reppert, Victor (2003). C.S. Lewis's Dangerous Idea: a philosophical defense of Lewis's argument from reason. Downers Grove, IL: InterVarsity Press.
- Rescorla, Michael (2015). The Computational Theory of Mind. Stanford Encyclopedia of Philosophy. URL: https://plato.stanford.edu/entries/computational-mind/(visited on 02/20/2019).
- Rickless, Samuel (2015). Locke On Freedom. Stanford Encyclopedia of Philosophy. URL: https://plato.stanford.edu/entries/locke-freedom/(visited on 02/13/2017).
- Rindler, Wolfgang (2003). *Introduction to Special Relativity*. Second Edition. Oxford: Oxford University Press.
- Robinson, Howard (1982). Matter and Sense. A Critique of Contemporary Materialism. Cambridge Studies in Philosophy. Cambridge: Cambridge University Press.
- (2009). "Idealism". In: The Oxford Handbook of Philosophy of Mind. Ed. by Brian McLaughlin, Ansgar Beckermann, and Sven Walter. Oxford: Oxford University Press. Chap. 10, pp. 189–205.
- (2016). Dualism. Stanford Encyclopedia of Philosophy. URL: https://plato.stanford.edu/entries/dualism (visited on 02/14/2017).
- Rohlf, Michael (2016). *Immanuel Kant*. Stanford Encyclopedia of Philosophy. URL: https://plato.stanford.edu/entries/kant/ (visited on 02/07/2017).
- Russell, Bertrand (1921). Sensations and Images. The Free Library. URL: http://russell.thefreelibrary.com/The-Analysis-of-Mind/8-1 (visited on 05/30/2019).
- Smithson, Robert (2017). "Introduction". In: *Idealism: New Essays in Meta-physics*. Ed. by Tyron Goldschmidt and Kenneth L Pearce.
- Snow, Lorenzo (1840). The Grand Destiny of the Faithful. The Church of Jesus Christ of Latter-Day Saints. URL: https://www.lds.org/manual/teachings-of-presidents-of-the-church-lorenzo-snow/

chapter-5-the-grand-destiny-of-the-faithful?lang=eng (visited on 08/14/2018).

- Stoljar, Daniel (2010). *Physicalism*. New Problems of Philosophy. Oxon: Routledge.
- Street, Sharon (2006). "A Darwinian Dilemma for Realist Theories of Value". In: *Philosophical Studies: An International Journal for Philosophy in the Analytic Tradition* 127.1, pp. 109–166.
- Temkin, Larry S. (1995). "A Continuum Argument for Intransitivity". In: *Philosophy & Public Affairs* 25.3, pp. 175–210.
- Tononi, Giulio et al. (2016). "Integrated information theory: From consciousness to its physical substrate". In: *Nature Reviews Neuroscience* 17, pp. 450–461.
- Williams, Bernard (1970). "The Self and the Future". In: *The Philosophical Review* 79.2, pp. 161–180.
- Winkler, Kenneth P. (1989). In: *Berkeley: An Interpretation*. Oxford University Press.
- Wiseman, Howard M and Eric G Cavalcanti (2017). "Causarum Investigatio and the Two Bell's Theorems of John Bell". In: Quantum [Un]Speakables II. Ed. by Reinhold Bertlmann and Anton Zeilinger. The Frontiers Collection, pp. 1–24.
- Wittgenstein, Ludwig (1960). *The Blue and Brown Books*. Second Edition. New York: Harper Torchbooks.
- Yetter-chappell, Helen (2017). "Idealism Without God". In: *Idealism: New Essays in Metaphysics*. Ed. by Tyron Goldschmidt and Kenneth L Pearce. Oxford Scholarship Online. Chap. 5.