Folk, Theory, and Feeling: What Attention is

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Table of contents

Title Page 1

Table of contents 2

Summary 6

Statement of Authorship 7

Dedication 8

Acknowledgements 9

Chapter 1 – One Question, Three Answers 12

1. What this thesis is about 12
2. Why this thesis is a valuable project 14
   - 2.1. Why providing an account of the folk psychology of attention is important 15
   - 2.2. Why providing an account of the metaphysics of attention is important 17
   - 2.3. Why providing an account of the phenomenology of attention is important 19
3. How the thesis will be set out 24

Chapter 2 – The folk Psychology of Attention 29

1. Introduction 29
2. Theories of folk psychology 31
   - 2.1. The beginnings of folk psychology 31
   - 2.2. Theory-Theory 36
   - 2.3. Simulation theory 37
   - 2.4. The Narrative Practice Hypothesis 39

3. Rejecting mindreading theories of folk psychology 41

3.1. Mental terms and mindreading differ 42

3.2. Mental terms, not mindreading, fit within folk psychology 47

4. Identifying (i) and (ii) 53

4.1. More evidence is required to identify the best account of folk psychology 54

4.2. The interpretation of (i) by the two theories 55

4.3. The interpretation of (ii) by the two theories 57

5. The method 64

6. The folk psychology of attention 67

6.1. Attending 67

6.2. Attentive 70

6.3. The superficial properties of attention 72

6.4. Fixing the reference 76

7. The relevance of the folk psychological concept to other fields of enquiry 80

8. Conclusion 82

Chapter 3 – The Metaphysics of Attention 85

1. Introduction 85

2. The starting point 87

3. Process theories of attention 89

3.1. James' theory 89

3.2. The FIT theory of attention 91

3.3. Campbell's adoption and development of the FIT theory 94

4. Adverbial theories of attention 98

4.1. The basic claims of adverbialism 98

4.2. Bradley's adverbial theory_____ 99

4.3. The adverbial theories of White and Ryle_____ 101

5. Contemporary personal level accounts of attention_____ 104

6. Mole's adverbial theory: attention is cognitive unison_____ 107

6.1. Mole's view_____107

6.2. The theory unpacked_____ 109

6.3. The advantages the cognitive unison theory has over modular process theories_____ 113

6.4. Mole's theory as the best theory available at the sub-personal level_____ 117

7. Cognitive unison and folk psychology_____ 122

7.1. The object of explanation_____ 127

7.2. Explaining the belief that attention is a single multi-purpose phenomenon_____ 128

7.3. Explaining the belief that attention is a resource_____ 131

7.4. Explaining the limits of attention_____ 135

7.5. Explaining the division of attention_____ 138

7.6. Explaining what attention does_____ 142

7.7. Explaining the role of attention in everyday psychological explanations_____ 147

8. The empirical answer_____ 150

Chapter 4 – The Phenomenology of Attention_____ 154

1. Introduction_____ 154

2. Folk psychology and phenomenology_____ 156

3. Mental acts and their phenomenal properties_____ 161

4. The method 163

5. Mental causation 166

6. Authorship 170

7. Effort 176

7.1. Attention is causally responsible for a feeling of mental effort 178

7.2. People always feel mental effort when they attend 179

7.3. Directed mental effort is peculiar to attending 191

8. Attentional effort 195

8.1. Self-awareness 195

8.2. The feeling of attentional effort differs in different mental acts 198

8.3. Intensity of attention 201

9. The final answer to the question 207

Chapter 5 – The importance of recognising perspectives 210

1. Introduction 210

2. Original insights of the three accounts 212

3. Applying the answers 217

4. The importance of recognising perspectives when describing mental phenomena 223

4.1. The danger of ignoring the folk perspective 224

4.2. The danger of ignoring the perspective of metaphysics 226

4.3. The danger of ignoring the perspective of phenomenology 229

4.4. The importance of recognising perspectives 231

5. Conclusion 232

References 234

Summary

In this thesis three independent answers to the question ‘what is attention?’ are provided. Each answer is a description of attention given through one of the perspectives that people have on the mental phenomenon. The first answer is the common-sense answer to the question, and is an account of the folk psychology of attention. The understanding of attention put forward here is of attention as a limited, divisible resource that is used in mental acts. The second answer is the empirical answer to the question, and is an account of the metaphysics of attention. The understanding of attention put forward here is the account of attention proposed by Christopher Mole in his theory of attention as cognitive unison. The third answer is the experiential answer to the question, and is an account of the phenomenology of attention. The understanding of attention put forward here is of attention as a kind of directed mental effort. These three answers to the question are shown to be intimately related to each other, and to inform each other in important ways. They are also shown to be fundamentally different answers to each other with none being reducible to another, or more important than another. In the end, they will be found to be answers that arise from the differing perspectives that people are restricted to when considering the nature of mental phenomena, perspectives that must be recognised if an account of such phenomena is to be provided.

Statement of Authorship

Except where reference is made in the text of the thesis, this thesis contains no material published elsewhere or extracted in whole or in part from a thesis submitted for the award of any other degree or diploma.

No other person's work has been used without due acknowledgement in the main text of the thesis.

The thesis has not been submitted for the award of any other degree of diploma in any other tertiary institution.

Lachlan Doughney

Dedication

This thesis is lovingly dedicated to my mother, Prof. Elizabeth Wheelahan. Her achievements have inspired me to work hard, and her support has always kept me focussed.

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Over the course of my thesis many people have assisted me, and they all deserve my gratitude. In what follows I am going to mention the people that I think deserve particular thanks. If I haven't given you the gratitude you deserve here, be sure to remind me of it.

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Chapter 1: One Question, Three Answers

1. What this thesis is about

What is attention? This is the question that will be answered in this thesis. However, one independent, multi-faceted answer to the question will not be provided. Instead, there will be three different answers. There will be an account of what the folk psychology of attention is, an account of what the metaphysics of attention is, and an account of what the phenomenology of attention is. These three answers to the question will be demonstrated to be intimately related to each other and to inform each other in important ways. They will also be shown to be fundamentally different answers, in content, status, and application. However, while each answer may be different in these three ways, all are an appropriate answer to the question, and the answer provided by one of them is no more important than that given by another. In effect, while all are about the same mental phenomenon, they offer different answers for different contexts, and all have their place in understanding the thing that we call 'attention'. An explanation of how these three responses can all be appropriate answers to the question 'what is attention?' will now be supplied. Then, an explanation of the importance of answering the question in each of these three ways, and a description of how the answers will be laid out in the rest of the thesis will be provided.

A question about the nature of something that is posed without appropriate context can elicit different responses. For example, if asked the question 'what is pain?' you may be inclined to answer in a few different ways. You could answer in terms of your experience, and say that it is a particularly unpleasant sensation that you feel in a part or parts of your body and that it can manifest itself in a variety of ways, through sensations like aching, throbbing, stabbing, or crushing. You could answer in terms of what kind of behaviour it causes by saying that it is the thing that lets you know that part of your body is damaged in some way

and that it motivates you to treat it. Or, you could answer by describing the kind of neural mechanisms give rise to the feeling, and the corresponding desire to ameliorate it. If the line of questioning were to be more specific, then only one of these answers would be appropriate. For example, if the question were 'what does pain feel like?', or 'what is the role of pain?', or 'what neural mechanisms constitute pain?', then one of the three descriptions would be the only appropriate answer. However, these answers are all appropriate ways to respond to the question 'what is pain?' generally construed. More than this, all of them are about the same thing – pain.

This result tends to apply when the same type of question is asked of a variety of phenomena. If there is a question about what something is, and this question is left vague, several appropriate answers often apply. This is because there are different perspectives on any phenomenon that can be adopted in response to a vague question about its nature. In the case of the question 'what is attention?' there are at least three perspectives on the mental phenomenon of attention that can be described.

The first way that the question 'what is attention?' can be answered is through a description of the common sense understanding of what attention is. This kind of answer is given through a description of the intuitive understanding that non-experts[1] have of attention – of the thing they readily and often describe themselves as paying, or giving to things, in their daily lives. In giving an answer like this, an account of the folk psychological concept of attention is being provided.

The second way the question 'what is attention?' can be answered is through a description of how various brain mechanisms and processes constitute attention, in light of the latest empirical evidence. This answer is a description of what attention is behind the

[1] Henceforth the term 'non-experts' should be generally taken to refer to those without any education in philosophy, psychology, or neuroscience. Occasionally, the use of the term 'the folk' will also be taken to refer to those without any education in philosophy, psychology, or neuroscience. The use of either of these terms is not intended to denigrate the insights that such people have about the nature of attention. Indeed, it will be argued throughout the thesis that the intuitions of such people concerning attention need to be taken into account by philosophers, neuroscientists, and psychologists, in their studies of attention.

scenes, an explanation of what is really going on when people give their attention to things. In effect, such an answer describes the brain mechanisms that can make up attention, and in so doing it explains how attention comes to manifest itself in the way in which people are acquainted with it. In giving an answer to the question like this, an account of the metaphysics of attention is being provided.

The third way that the question 'what is attention?' can be answered is through a description of what attention is in felt experience. Answering the question in this way involves a description of what is essential to attention in the various ways in which it manifests itself in experience. In giving an answer to the question like this, an account of the phenomenology of attention is being provided.

To conclude, the question 'what is attention?' is justifiably answerable in terms of the common sense understanding of attention, in terms of what attention has been found to be through empirical investigation, or in terms of our experience of what attention is. They are all acceptable answers to this question when it is posed generally. Given this, the question 'what is attention?' will be answered in these three ways in this thesis. First, though, an explanation of why answering the question in each of these ways is an important enterprise, and a description of how these answers will be set out in the thesis, will be given.

2. Why this thesis is a valuable project

Very little justification needs to be given for answering the question 'what is attention?' construed at this level of generality. Attention is a fundamental aspect of our mental lives. It helps us navigate the world every day, and every human being relies on it. It is something that we take to be involved in a variety of mental states, from visual perception to thought, and it is something that we believe is necessary to perform activities from thinking about philosophy to watching sport. Indeed, one of the things we know about attention is that it enables us to

read things – like the sentence you are reading right now. Understanding the nature of attention is one of the most important tasks we have, if we seek to understand our own minds. However, taken at this level of generality, the question 'what is attention?' cannot be answered cohesively. There are different ways we view attention and so different ways of answering this question. As noted earlier, three separate answers to the question will be laid out independently in this thesis. As such, there need to be justifications for giving an account of each of these different perspectives on what attention is. These will now be provided, starting with the justification for an account of the folk psychology of attention.

2.1. Why providing an account of the folk psychology of attention is important

Giving an account of the folk psychology of attention might seem somewhat an unnecessary task. Folk psychology is the body of information concerning the mind that 'the folk' – namely those without special training in philosophy, psychology and other relevant disciplines – believe about their own and others' minds. Given this, the folk psychological concept of attention should be immediately accessible through a consultation of our more basic intuitions. It should be something that requires no in-depth analysis to identify, in contrast to that which will be given in this thesis. The problem with this is that, although everyone draws upon the folk concept of attention, folk or not, it is not a concept that can be simply described without analysis. It is a complex communicative tool that we all know how to use, but have difficulty in explaining. In effect, it is somewhat like a car. People can know how to use a car, but, without special training, it is unlikely that they will know much about the different components that constitute it. Or, to use another example, it is like one of the myriad grammatical rules that we use with no effort yet could not describe if we were asked. In essence, the folk concept of attention is something that we all draw upon to understand,

explain, and predict the behaviour of ourselves and of others in our everyday lives, but it is not something that has a content that can be explained without a considered and detailed analysis. As will now be argued, there are two significant reasons for why the folk concept of attention should be explored through such an analysis.

The first reason for analysing the folk concept of attention is that few folk psychological concepts, except perhaps for those of belief and desire,[2] have been substantively explicated. They should be. Folk concepts comprise the understanding that non-experts hold about what their own and others' minds are like. It is important that the contents of such concepts are identified so that a clearly defined understanding of these concepts, rather than a mere intuitive understanding, is developed. In effect, to continue the car analogy, it is important to know the nature of the parts that constitute the car and not just know how to drive it. Obviously, this should not be taken as giving an answer to what attention actually is either in our brains or in our experience, but rather to what most people intuitively understand attention to be. Still, this is an important task to achieve. In filling out the picture of what most people generally understand attention to be, by identifying the content of the folk concept, the picture of how most humans understand themselves and others is improved. This is an intrinsically valuable enterprise, and it is enough motivation to embark on an analysis of the folk psychology of attention, in and of itself.

The second reason for analysing the folk concept of attention, as will be argued throughout this thesis, is that folk psychological concepts have an important role to play in understanding attention in different areas of philosophical and scientific discourse. In particular, the folk concept will be identified as something that should be explained by any mature account of the metaphysics of attention, and as something that can help guide the identification of the phenomenology of attention, by identifying the basic intuitions people

[2] For an example see Jackson and Pettit (1993).

have about the role played by attention in experience. Hence, it is important to explain the folk concept of attention because it informs and guided the other perspectives on the nature of attention in important ways.

2.2. Why providing an account of the metaphysics of attention is important

It has already been established that it is important to answer the question 'what is attention?' generally construed, due to the large role it has in our mental lives. If this is so, it is doubly important to answer the question in the most accurate way possible, by providing an account of attention that accords to reality in the closest way that can be achieved. It will now be explained how a good account of the metaphysics of attention provides this kind of account, and is thus something that is important to develop.

An account of the metaphysics of any phenomenon is an account of a thing that is, as the philosopher Christopher Mole puts it, 'basic, even from the point of view of physics'.[3] It provides the most basic account of that thing possible, the kind of account that is not reducible to anything else about that thing but rather is responsible for everything else about that thing. In order to achieve this kind of foundational account, a good account of the metaphysics of any phenomenon should be able to do two things. First, it should be able to explain why the thing manifests the set of properties that it does in the everyday acquaintance that we have with it. Second, it should be accurate to the way the world actually is, through the use of empirical evidence. For example, a good account of the metaphysics of water, of water as H_2O, is one that describes the nature of that phenomenon in the most basic way possible. This account can explain why the varied aspects of our acquaintance with it are the way they are, through recourse to the basic properties that are possessed by the phenomenon.

[3] Mole (2011, p. viii).

That is, it will be able to explain why water is a liquid in the way we are normally acquainted with it, why it turns to steam at a certain temperature, why certain other substances dissolve in it, etc., by recourse to the way that the molecules that constitute it behave in particular circumstances. Moreover, it is an account based on empirical evidence concerning the nature of water and not just of conceptual analysis concerning it, so there is good reason to believe that it accurately accords to the actual world and not just some possible world.

In the case of any mental phenomenon, the aforementioned means two things. First, a good account of the metaphysics of a mental phenomenon must provide an account of that thing based on the latest empirical evidence assembled by those in the sciences. Second, it must provide a coherent conceptual framework which explains why the other perspectives people possess on the phenomenon, such as their experience of it and their everyday beliefs about it, are the way they are. By doing these things it provides both the most basic, and the most accurate account of what that thing is, that can explain the most things about its nature possible. So, if a considered account of the metaphysics of attention is developed the best means to explain why our experience of attention manifests itself in the way it does, and the most accurate account of what attention is apart from our experience of it will be provided. As has already been demonstrated, this is an important thing to do, and so it will be done in this thesis.

None of the above is to say that the account of the metaphysics of attention that will be arrived at in this thesis is of greater importance than the other accounts of attention that will be provided in it. The aim of this kind of account of attention is to provide a coherent explanation of what attention is that draws on empirical data and also explains why people experience attention in the way that they do, and why they have the everyday beliefs about it that they do. Importantly, while it explains these things and relates to them in a variety of ways that will be explored in the thesis, it does not, itself, give any detailed account of them.

To identify the nature of the experience that people have of attention, and identify the everyday beliefs they have about it, independent investigation is required. In sum, the metaphysics of attention is the explanans, and not the explanandum. As a result, it is not the only or most important answer to the question 'what is attention?', given that it relies on in-depth and cohesive accounts of attention in phenomenal experience, and of the folk concept of attention, to explain in the first place.

The account of the metaphysics of attention that will be endorsed here is also hostage to empirical evidence in ways that the other answers to the question 'what is attention?' are not. Any good account of the metaphysics of attention will draw on current empirical evidence in order to identify what attention should best be considered to be. This means that the account that will be provided here is simply the best available at this time, and may have to change when new empirical evidence is discovered. However, although the account of the metaphysics of attention endorsed in this thesis is likely to have to change with new data, providing it is still important. Understanding the basic nature of attention –what attention is beyond the naïve impressions that people have of it – is a valuable enterprise.

2.3. Why providing an account of the phenomenology of attention is important

One might argue that it is unnecessary to give an in-depth account of the phenomenology of attention, by claiming that the felt qualities of attention are obvious and can be explained by a simple description of experience. It will now be demonstrated that this claim is false, and that this argument is flawed as a result. Then, two reasons will be supplied as to why it is desirable to answer the question 'what is attention?' through an in-depth description of the experience people have of attention.

Despite the way things seem, an explanation of which phenomenal qualities belong to which mental phenomenon is not something that can be provided through a simple description of our experience at any given time. This fact can be illuminated by a common theme in the work of the philosopher Michael Martin. Much of Martin's work deals with a scenario in which, through introspection, it is impossible to determine any phenomenal difference between two states that are radically different in most cases.[4] These states are veridical perception and hallucination. In some cases the phenomenology of the two cannot be separated, and they are indistinguishable from the perspective of an observer. Aside from the points Martin makes about veridical perception in his work, Martin also shows that in some cases it is hard to determine the relationship between different feelings and different mental phenomena, and so it is problematic to identify which feelings relate to which mental phenomenon through descriptions based on introspection in individual cases. Individual cases are often ones that elicit feelings that are at odds with our experience of a phenomenon generally,[5] have characteristics that are not essential to our experience of that phenomenon,[6] or result in us mistaking certain phenomenal characteristics as those that arise from one mental phenomenon when they are actually caused by another.[7] To describe the phenomenal characteristics of a particular phenomenon, a broad enquiry into as many of its manifestations as possible is required, in order to find out what it is really like.

What this means is that identifying the phenomenal character of attention should not be considered an easy task. It will require careful and considered analysis of a diverse range

[4] See Martin (2002, 2004, and 2006).

[5] An example of this is found in our experience of pain. Pain rarely has pleasurable characteristics, although some people (e.g. masochists) describe it as having them in certain painful experiences. Were the phenomenology of pain to be identified from an analysis of such experiences as these, and no general analysis of painful experiences were conducted, the phenomenology of pain would likely be mischaracterised.

[6] For example, one could not give an account of what taste is like by describing sucking on a lemon, or by sucking on a lollypop, or by eating a steak. To give an account of taste, only the essential characteristic shared by these cases could be given.

[7] An example of the final point here could be found in intense emotional experiences that are confusing and hard to describe. For example, when upset, it is often hard to determine if the feelings we are currently having are caused by any of sadness, anxiety, or anger. In such a case, if we sought to give an analysis of the phenomenology of one of these emotions by describing the scenario, we may mistakenly attribute our feelings to the wrong phenomenon, due to the confusing nature of the situation. A broader analysis of our experience in these cases would avoid such a misattribution.

of experiences. Ultimately, although we experience our attention being used in our everyday lives when we could be described as 'focusing' or 'concentrating' on things, it is not something that we are aware of in any structured way. It is important that such structure is provided, so that we can come to understand what our experience of attention is really like. As such, this structure will be provided in this thesis through the development of the experiential answer to the question 'what is attention?'

There are also two reasons, beyond the fact that it provides a cohesive account of our experience of attention, that this experiential answer is important. Both follow from the fact that attention is something that has a nature which cannot and should not be taken for granted. First, such an account is important because it can assist empirical psychologists and neuroscientists in their research of particular brain mechanisms as they relate to attention, by acting as a safeguard against misidentification. Second, it is important to create an account of the phenomenology of attention because in analytic philosophy it is an underexplored area of phenomenal consciousness. Arguably, it is an area that needs to be explored before others receive consideration. Both of these points will be explained in turn.

The experiences that people have of mental phenomena are things that empirical psychologists and neuroscientists often seek to explain by identifying the brain mechanisms that underpin them.[8] Without understanding the nature of the experience they seek to explain fully, researchers in these fields may come to false conclusions. This is the case, as if armed with only an impressionistic or superficial understanding of the experience people have of a particular mental phenomenon, or an understanding based on a misleading experience of that mental phenomenon, an empirical psychologist or a neuroscientist may identify brain

[8] There are legion examples of this. For one, see Fitzgerald et al. (2004), for an attempt to identify the neural underpinnings of the feeling of disgust.

mechanisms that do not relate to the way that people experience that mental phenomenon generally.[9]

The development of an account of the phenomenology of attention can help people in these fields avoid the kind of errors just described. A detailed and accurate account of the phenomenology of attention can identify the kind of experience that is essential to attention and also the kind of phenomenal qualities that attention may exhibit under certain circumstances. In so doing, it will help neuroscientists and empirical psychologists who seek to describe the neural underpinnings of our experience of attention by providing a structured account of what attention is in our experience, an account that they can use as the thing which they seek to explain through their empirical research. This will help prevent the misidentification of brain mechanisms as they relate to attention, as researchers will not be subject to misinterpretations of the thing they seek to explain. Accordingly, it is important to give a detailed account of our experience of attention in this thesis. With this, the second reason why providing an account of the phenomenology of attention is important task will now be supplied.

Despite being an object of investigation in some fields such as in psychology,[10] the phenomenology of attention has not been discussed at any length by analytic philosophers.[11] However, attention is a mental phenomenon that has been used by analytic philosophers in many different ways to make points about the nature of different aspects of phenomenal consciousness. For example, there is a raft of material concerning the effect attention has on

[9] For a particularly pertinent example, see Sarter, et al. (2005, p. 146). This study attempts to identify the neural underpinnings of attentional effort. In this case the phenomenology of attentional effort is something that is falsely assumed that 'everyone knows' about, and needs little explanation. This is precisely the kind of methodological error that a sophisticated account of the phenomenology of attention can help avoid, by providing a tenable alternative.

[10] These psychological interpretations will be discussed in detail in the fourth chapter. For an example see Csikszentmihalyi and Nakamura (2010).

[11] Watzl (2010) is the only real example of an account of the phenomenology of attention, given that he posits self-awareness of attending as an essential component of our experience of attention. However, his account focuses primarily on the effect attention has on the phenomenology of other states.

the phenomenology of visual perception.[12] This is problematic. There is no clear marker within analytic literature to determine both how and where attention is experienced within phenomenal consciousness. This raises doubt over the accuracy of material that claims that attention plays particular roles with regard to the phenomenology of other mental states. If a marker is developed for analytic philosophers, a better picture of how and when attention can be said to interact with the phenomenology of other mental phenomena will be provided. Consequently, the accuracy of discussions concerning phenomenal consciousness more generally will be improved. This is the case, as if there is a feeling that accompanies the use of attention – and it is part of the common-sense image of the world that we do feel attention when we use it[13] – then analytic philosophers will be better equipped to know the instances in which attention effects the phenomenology of certain mental states, through identifying the phenomenology of attention manifesting itself in those instances.

Ultimately, if analytic philosophers seek to identify the nature of phenomenal consciousness, a clear picture of the phenomenology of individual mental phenomena should be developed first, before going on to provide an understanding of the role they play with regard to the phenomenology of other mental phenomena. This is why the phenomenology of attention should receive exploration within the analytic philosophy. Attention is one of the key players in our experience, it is a player that we take to interact with the phenomenology of many different states, and analytic philosophers should be clear about how it is experienced itself, before they provide an account of how it interacts with the phenomenology of other mental states. As such, and as it will assist in empirical research concerning the neural underpinnings of our experience, it is clear that developing an account of the phenomenology of attention is an important task. This task will be carried out in this thesis, wherein an

[12] For some examples among many, see Block (1995), Chalmers (2004), Macpherson (2006), Nickel (2007), Peacocke (1993), and Tye (2010).
[13] This will be shown to be the case in chapter two, through the account of the folk psychology of attention that is provided in it.

account of the phenomenology of attention will be developed that draws upon material already developed in psychology, but is clearly developed as a tool for analytic philosophers, which relates directly to their ideas about the nature of phenomenal consciousness.

3. How the thesis will be set out

In the chapters that follow three answers to the question 'what is attention?' will be provided. This will begin with the common-sense answer to the question in the second chapter. The common-sense answer will be constituted by the folk psychological concept of attention that is provided in the chapter.

To begin the chapter, a means by which to identify the content of the folk psychological concept, and an account of the relationship the concept has to other fields of enquiry, will be determined. These two points will be determined through an assessment of theories that provide accounts of what folk psychology is. This assessment will demonstrate that (i) the contents of folk psychological concepts can be identified through an analysis of the way mental terms are used in everyday language, and (ii) folk psychological concepts are explananda for those in other fields of enquiry, such as empirical psychology, neuroscience, and philosophy.

After this, the content of the folk psychological concept of attention will be identified through an analysis of the way term 'attention' is used in everyday language. This analysis will consist of identifying the superficial properties that are picked out with the term 'attention' by looking at the way it is used in different contexts, and then using these properties to 'fix the reference' of the term by giving a cohesive description of them. Reference-fixing, in this case, is a notion borrowed from the philosophy of language, found in the classic works of philosophers like Saul Kripke, and Hilary Putnam.[14] Under this

[14] See Kripke (1980), Putnam (1973, 1975), and Schwartz (1977).

understanding, when one fixes the reference of a term, one provides a description of the superficial properties of its referent or referents (such as those properties that are directly perceivable, those that are knowable through rudimentary causal acquaintance with the thing, etc.) so that the audience understands what is being referred to. Such a description is not posed as a definition of that term, and it is not posed as an account of the underlying nature of the thing being picked out. Rather it is a description that helps people pick out that thing in the first place. Fixing the reference of the term 'attention' is a good way to provide an account of the content of the folk psychological concept of attention, and so it will be the method used to illuminate the content of the folk concept. The reason for this is that it provides a way to unify, under a cohesive description, the various properties that the folk attribute to attention when they use the term 'attention' in everyday discourse.

When this method is applied and the folk psychological concept of attention is identified, it will be shown to be comprised of three beliefs that the folk have about attention. These beliefs are what the folk believe it is, what they believe it does, and what they believe it does it for. The folk will be found to believe that attention is a limited divisible resource, used voluntarily and involuntarily in our mental acts. They will be found to believe that its use in these acts focuses our consciousness on the objects or contents of such acts. They will be found to believe that it does this in order for us to access, and then to have the capacity to retain, information about these objects or contents. Having identified the folk concept, the chapter will conclude with an account of the use of the folk concept in regard to different areas of enquiry, in particular the next two answers to the question 'what is attention?'.

In the third chapter, the next answer to the question 'what is attention?' will be given, through a description of what attention should be best considered to be, in light of the latest empirical evidence. To do this, the best account of the metaphysics of attention available will be identified, and the account of attention it provides will be posed as the answer to the

question. This account of attention is Christopher Mole's theory of attention as cognitive unison.[15]

To begin the chapter, all of the theories of the metaphysics of attention that are in competition with Mole's theory will be described, and all of them will be argued to be inadequate accounts of the metaphysics of attention. Then, Mole's theory, and its virtues, will be expounded. A brief description of Mole's theory can be expressed by the following:

> A case of attention occurs iff a subject is engaged in a personal level activity which is guided by his/her understanding of it, and all of the cognitive processes which provide the means to engage in the activity, so understood, are operating in unison in aid of the activity, and are not being used in any other activity.[16]

This is a multi-level account of attention. It simultaneously explains what attention is at both the personal level, that is at the level of persons with minds, desires, a will, beliefs, and so on, and at the sub-personal level, that is at the level of parts of people, involving brain mechanisms, relationships between brain mechanisms, and so on. It will be argued that this theory is the best theory of the metaphysics of attention currently available, and that it is also a very good theory of the metaphysics of attention, due to its ability to do three things. First, it will be found to give a cohesive account of how attention operates in our brains, in a way that accords with the latest empirical evidence. Second, it will be found to surpass any competing interpretation of the metaphysics of attention in the way it accounts for the empirical data, and in its ability to show how our underlying neural architecture generates the experience of attention that we have. Third, it will be found to be capable of explaining why the folk

[15] See Mole (2005, 2011) for his account of attention as cognitive unison.
[16] This is a characterisation of Mole's theory that is developed in the third chapter.

concept of attention is the way it is and of explaining areas where the folk concept is deficient, something that will be stressed as being an important task.

The final answer to the question ‘what is attention?’ will be supplied in the fourth chapter. This answer will be constituted by an account of what people experience attention to be. In other words, an account of the phenomenology of attention will be created in this chapter, and posed as an answer to the question.

The aim of the interpretation of the phenomenology of attention in this chapter will be to provide an informative account of the phenomenal property that people attribute to attention in their experience, and understand loosely in terms of a feeling of ‘focus’ or ‘concentration’. To begin the chapter the folk psychological concept of attention will be argued to be useful tool, as it picks out where the phenomenal property may be isolated within phenomenal experience. This is within the phenomenal features of mental acts when people refer to them as forms of ‘attending’. Three criteria will then be developed, and phenomenal properties that people often experience when they are considered to be ‘attending’ will be tested against them, in order to identify the phenomenal property that people take as representative of attention. These criteria are:

(i) The phenomenal property must be absent in a particular type of mental act when it cannot be referred to as a form of ‘attending’ and be present when it can.

(ii) The phenomenal property must be experienced in all mental acts when they can be intuitively referred to as forms of ‘attending’

(iii) The phenomenal property must only be experienced in mental acts when they can be intuitively referred to as forms of ‘attending’

A variety of phenomenal properties will fail to satisfy the criteria. However, one phenomenal property will be tentatively argued to satisfy the criteria, and so will be identified

as the feeling that people attribute to attention and understand in terms of 'focus' or 'concentration'. This phenomenal property is a form of directed mental effort, and will be dubbed 'attentional effort'. It will be shown to be able to be partially characterised as a feeling of authorship, and also to manifest a variety of different characteristics across cases. To conclude the chapter, a description of attentional effort will be posed as the experiential answer to the question 'what is attention?'.

In the fifth and final chapter, the perspectivist approach taken to understanding attention in the thesis will be justified. To do this, it will first be demonstrated that each of the answers to the question 'what is attention?' all provide important and original insights about attention. Second, the answers, due to their different natures, will be argued to have a variety of important roles to play in fields of enquiry from philosophy, to developmental linguistics, to cognitive science. Finally, it will be argued that the perspectivist approach taken in the thesis, that is recognising the perspectives out of which each answer to the question 'what is attention?' was developed, was the right approach. This will be shown to be the case, due to the philosophical problems that arise when the perspectives through which people view mental phenomena are ignored. Ultimately, this chapter will establish that the perspectivist approach taken to attention in the thesis not only generates useful insights about attention, and useful insights for those in various fields of enquiry, but that it is also the right approach to understanding the phenomenon.

Chapter 2: The Folk Psychology of Attention

1. Introduction

Most broadly construed, folk psychology is the body of information concerning the mind that 'the folk' – namely those without special training in philosophy, psychology and other relevant disciplines – believe about their own and others' minds. As such, describing the folk psychological concept of attention gives an answer to the question 'what is attention?' in terms of the way in which attention is generally understood. That is, it provides an account of what everybody knows attention is,[17] that thing that people talk of 'paying' or 'shifting', that is 'caught' by things or is 'attracted' to things, and so answers the question 'what is attention?' in line with common-sense. Consequently, an account of the folk psychological concept of attention will be developed in this chapter, in order to provide the common-sense answer. It will be shown that although the folk concept is implicitly held by those without any philosophical or psychological training, it is also extremely complex and has a range of applications. In particular, various ways to utilise it, or expand upon it, in sophisticated areas of philosophical and psychological enquiry will be identified. In this way, the folk concept of attention will be shown not just to be a basic concept held by the community, but also a tool that can assist more complex academic enquiry.

Before the folk psychological concept of attention is explicated in this chapter, the following points will be identified:

[17] See James (1894) for the use of the classic phrase 'everybody knows what attention is', which is now widespread in literature concerning attention.

(i) The means by which the content of folk psychological concepts may be determined.

(ii) The relationships that folk concepts have to different fields of enquiry.

These two points will be identified, given that the aim of this chapter is not only to identify the content of the folk psychological concept of attention, a task that will require an understanding of how to determine its content, but also to determine what relevance, if any, this concept has to other fields of enquiry. This is something that requires an understanding of what folk psychology is and how it relates to other disciplines. After all, the aim here is to not only provide an account of the content of the folk concept of attention, but also an account of what this folk concept actually is.

In what follows (i) and (ii) will be identified through a three stage process. First, the major interpretations of what folk psychology is will be described. Second, most of these interpretations will be rejected as adequate accounts of folk psychology, given that they hold that folk psychology is something that is concerned with mindreading, a phenomenon that will be demonstrated to fall outside an adequate account of what folk psychology is. Third, the interpretation of (i) and (ii) by the only two theories that were not rejected in the previous section – the Narrative Practice Hypothesis and David Lewis' interpretation of the 'Theory-Theory' – will be discussed. Under both theories the interpretation of (i) will be that the content of the folk psychological concepts is determined by the way mental terms are used in everyday language. Under both theories the interpretation of (ii) will be that folk psychological concepts are explananda for more complex areas of enquiry such as philosophy, neuroscience, and empirical psychology. Given that these theories will be the only acceptable interpretations of folk psychology remaining, their interpretation of (i) and (ii) will be endorsed, and the folk concept will then be expounded.

To expound the concept an ordinary language method to identify the folk concept will be developed and then applied. This method will have two stages. The first stage will be to identify the beliefs of the folk concerning attention by giving an analysis of the terms that refer to it. When this part of the method is applied, the terms ‘attending’, ‘attentive’, ‘attentively’, and ‘attentiveness’ will be excluded from playing a role in the analysis of attention, as they will be demonstrated not to refer to attention, but to related folk psychological phenomena. Only the term ‘attention’ will be found to refer to attention, and the analysis of this term is what will identify the appropriate folk psychological beliefs. With these beliefs, the second stage of the method will then be able to be applied. This stage will involve fixing the reference of the term ‘attention’ in virtue of the beliefs that were previously identified. Fixing the reference of this term will provide a cohesive description of the beliefs the folk have about attention. In other words, it will give an account of the folk psychological concept of attention. When this is achieved, the aim of the chapter will also be achieved: the folk psychological concept expounded will be posed as the common-sense answer to the question ‘what is attention?’

2. Theories of folk psychology

2.1. The beginnings of folk psychology

To begin looking at different theories of folk psychology, some background is required. The reason for this is that, if members of the public were to be asked if they are drawing upon a theory, a kind of mental simulation, or a kind of narrative practice whenever they describe their own and others beliefs, thoughts, or attention, they would probably seem confused. Then, after some deliberation they would likely conclude that they are not doing any of these things, but are just describing things that seem obvious. In effect, it does not conform to the intuitions of non-experts to think of folk psychology as a theory, or a kind of simulation, or a narrative

practice. Their intuitions seem drawn towards the Cartesian view that people necessarily have immediate access to their own minds, and inferential access to those of others, and can describe them accordingly. As such, an explanation of why the discussion is centred on views that are against this intuition needs to be provided. As will now be shown, the reason comes from a curious thought experiment developed by Wilfrid Sellars in the 1950s.[18]

Sellars in his paper 'Empiricism and the Philosophy of Mind' came up with a thought experiment that was to change the philosophical and psychological view of the way in which most people understand their own minds and those of others.[19] In this thought experiment, Sellars describes a 'pre-historical' society composed of what he calls our 'Rylean ancestors'. The people in this imaginary ancient society do not posit any internal episodes, like thoughts, beliefs, intentions, and desires in others in order to explain others' behaviour. This is because they lack any conception of inner mental events occurring in themselves or in others.[20] Rather, they conceive of themselves and others entirely in terms of public behaviour and behavioural dispositions – and have a language that reflects this.[21] This is the case until a man called Jones changes Sellars' imaginary society forever. Jones comes up with a theory to explain the behaviour of others. Sellars describes it as follows:[22]

> [I]n the attempt to account for the fact that his fellow men behave intelligently not only when their conduct is threaded on a string of overt verbal episodes — that is to say, as we would put it, when they 'think out loud' — but also when no detectable verbal output is present, Jones develops a theory according to which overt utterances are but the culmination of a process

[18] See Sellars (1956) for the original publication of his seminal article 'Empiricism and the Philosophy of Mind'.
[19] For example the intimidating set of philosophers, Patricia Churchland (2002), Paul Churchland (1979), Daniel Dennett (1987), Jay Garfield (1988, 1989), William Lycan (1987), Stephen Stich and Ian Ravenscroft (1994), Shaun Nichols (2002), and Tyler Burge (2007, p. 443) all credit this as a landscape-changing myth, with the first five indicating that it has strongly influenced the way they themselves interpret folk psychology.
[20] The term 'mental events' as it is used here is used to describe any mental phenomenon. This includes things like states (i.e. belief), activities (i.e. thinking), achievements (i.e. noticing), and accomplishments (calculating a sum).
[21] In effect, their means of interaction with each other, and their understanding of themselves, is one that is consistent with the less favourable interpretations of Gilbert Ryle's (1949) behaviourist theory in A Concept of Mind. Hence they are called 'our Rylean ancestors'.
[22] The quotes from Sellars work are borrowed from Stich and Ravenscroft (1994) who also give an exposition of the myth of Jones.

> which begins with certain inner episodes. And let us suppose that his model for these episodes which initiate the events which culminate in overt verbal behavior is that of overt verbal behavior itself. In other words, using the language of the model, the theory is to the effect that overt verbal behaviour *is the culmination of a process which begins with ''inner speech''*.[23]

Jones, once he is armed with this theory of 'inner speech', or of what he calls 'thoughts'[24], teaches it to those in his society. The theory develops from here, with those who use the theory becoming able to ascribe the theoretical entities that it postulates (thoughts) to themselves in order to explain their own behaviour to others. Sellars' explains this development of the theory in the following way:

> [O]nce our fictitious ancestor, Jones, has developed the theory that overt verbal behavior is the expression of thoughts, and taught his compatriots to make use of the theory in interpreting each other's behavior, it is but a short step to the use of this language in self-description. Thus, when Tom, watching Dick, has behavioural evidence which warrants the use of the sentence (in the language of the theory) ''Dick is thinking 'p' '' ... Dick, using the same behavioral evidence, can say, in the language of the theory, ''I am thinking 'p' ''... And it now turns out — need it have? — that Dick can be trained to give reasonably reliable self-descriptions, using the language of the theory, without having to observe his overt behavior. Jones brings this about, roughly, by applauding utterances by Dick of ''I am thinking that p'' when the behavioural evidence strongly supports the theoretical statement ''Dick is thinking that p''; and by frowning on utterances of ''I am thinking that p,'' when the evidence does not support this theoretical statement. Our ancestors begin to speak of the privileged access each of us has to his own thoughts. What began as a language with a purely theoretical use has gained a reporting role.[25]

[23] Sellars (1997, pp. 102-103). The italics are Sellars'.
[24] Ibid, p. 104.
[25] Ibid, pp. 106-107. The italics are Sellars'.

With this, Sellars provides a story of a society where the mental concept of 'thought', specifically the same concept of 'thought' that most people now have in western societies, was arrived at purely through being posited as an explanation for 'overt verbal behaviour'. It is notoriously difficult to interpret what Sellars was attempting to argue in many parts of his work, given his impenetrable writing style.[26] As such, in what follows, only the clearest and most straightforward points Sellars was trying to make in this thought experiment will be drawn out, along with the corresponding influence that the thought experiment has had on interpretations of folk psychology.[27]

Sellars' 'myth of Jones', as it is commonly known, is an attack on the Cartesian view that people can be certain that they have immediate access to, and knowledge of, their own mental states. The myth of Jones shows that it is conceivable that the language used to describe mental states, and the concepts that underpin this language, are not immediately accessible through introspection but are developed entirely from a theory. This is the case, as through the myth, a possible state of affairs is described where people have the same understanding of inner mental episodes that they do now, not as a result of privileged introspective access, but through them being theoretical posits which can explain certain behaviour. This debunks the Cartesian view that people necessarily have privileged access to, and knowledge of their own mental states, as their basic understanding of their own minds and those of others could come entirely from a theory. In this way, Sellars myth dispels the common intuition that most people have which is that 'folk psychology' is not 'folk

[26]Interpretations of Sellars' arguments vary. For example, the prominent philosophers Robert Brandom (1998) and John McDowell (2009, p. 14fn) interpret the arguments he makes in 'Empiricism and the Philosophy of Mind' in different ways. Both of their interpretations of Sellars have been called into question more recently by Niels Olsen (2010). Despite this apparent strong disagreement, there are many other interpretations of Sellars. Some consider those of Brandom and McDowell actually to be similar to each other. With Sellars, there is an industry in interpreting, and debating, the meaning of his work akin to the interpretations of his European contemporaries such as Martin Heidegger, Maurice Merleau-Ponty, and Edmund Husserl. See O'Shea (2011) for a broad account of the way Sellars has been interpreted.

[27] See DeVries and Triplett (2000), for a discussion of the various things Sellars was trying to solve with this myth, including the problem of other minds.

psychology' at all – it is just psychology, and immediately accessible mental phenomena like beliefs and desires are being described whenever mental terms are used.

It is likely that Sellars was not actually proposing that the myth of Jones, or something very similar to it, is actually how people came to have a set of folk psychological concepts. After all, in Sellars' own words it is a 'piece of science fiction'.[28] However, in light of this thought experiment some thinkers have attributed to Sellars the view that people do have a folk psychological theory composed of beliefs, desires, and the like, that they use to predict and explain the behaviour of others.[29] No position on this issue will be taken here.[30] What is important is the influence that this thought experiment has had. It sparked off what was to become the common view amongst analytic philosophers, psychologists, and neuroscientists, which is that the understanding of the mind held by ordinary people is one that is based on a theory which is used to predict and explain behaviour.[31] So, with this, an explanation of why such a counterintuitive view of folk psychology became the dominant position has been provided. This kind of view was the first viable alternative to the intuitively attractive Cartesian view, which by this stage was already so shot full of holes by behaviourists such as Gilbert Ryle[32] that such an alternative was screaming out for attention. With this in hand, a discussion of the content of interpretations of folk psychology as a theory, and then a discussion of the other interpretations of folk psychology that have followed it, will now be supplied.

[28] See Sellars (1997, p. 91).
[29] See P. S. Churchland (2002, p. 108), Nichols (2002), and Ramsey (2007).
[30] See O'Shea (2012) for an up to date and in depth account on what Sellars was actually arguing concerning the understanding people have of minds of others.
[31] See P.M. Churchland (1993).
[32] See Ryle (1949).

2.2. Theory-Theory

The 'theory-theory' of folk psychology, as it is now commonly known[33], hypothesises that folk psychology is a theory that people implicitly possess in order to make explanatory and predictive hypotheses about other people's behaviour. Under some interpretations, the content of this theory is something that is constituted by, as Ian Ravenscroft puts it, a 'theory of behavior represented in the brain'.[34] This sub-personal theory is one which contains a set of theoretical posits that play a role in, among other things, predicting and explaining the behaviour of others. This kind of interpretation of folk psychology is most clearly associated with the views of cognitive scientists and empirical psychologists, who try to identify the exact neural underpinnings of this theory and attempt to determine when and how it develops in human beings.[35] Under a different kind of theory-theory interpretation of folk psychology, folk psychology is a theory that is determined by the platitudes most people would be likely to endorse in everyday psychological explanations, with the mental terms used in such explanations forming the terms of the folk theory. This interpretation of folk psychology comes from a series of seminal papers by David Lewis.[36] The mental phenomena that play a role in any version of the theory-theory minimally involve beliefs and desires and maximally involve all the key mental players, which include all the intentional mental states, mental acts and mental dispositions that people draw upon when they talk about their own and others' minds.

Both Lewis' interpretation of folk psychology and the sub-personal interpretation of folk psychology are not necessarily incompatible. For example, it may be that folk psychology is a theory of behaviour represented in the brain that is also expressed, to a greater

[33] Adam Morton coined this term first in his 1980 book Frames of Mind.
[34] Ravenscroft (2010).
[35] For some examples among many see Carruthers (1996), Fodor (1975, 1983), Gopnik and Meltzoff (1997), Gopnik and Wellman (1994), Premack and Woodruff (1978).
[36] See Lewis (1966, 1970, and 1972).

or lesser extent, whenever people use mental terms in everyday situations.[37] However, these interpretations of the theory may be incompatible and, in some theory-theory interpretations of folk psychology, they are. For example, it is common now to hold that the theoretical posits that are used by brain mechanisms in order to predict and explain behaviour of others are far more complex than those mental phenomena people attribute to each other in everyday language, and so the theory of behaviour 'represented in the brain' differs from that in everyday language.[38] This point will be become important later on and will be explained in detail.[39] However, now it will suffice to note that, until the mid-1980s, the theory-theory was the only widely recognised interpretation of folk psychology.

2.3. Simulation theory

In 1986 the theory that folk psychology is a form of mental simulation was independently argued for in two papers. These papers are Jane Heal's 'Replication and Functionalism' and Robert Gordon's 'Folk Psychology as Mental Simulation'.[40] In these papers both Gordon and Heal criticised the theory-theory and argued for a new interpretation of folk psychology. Under this interpretation, folk psychology is a kind of mental simulation performed by agents in order to understand the behaviour of others through the mental simulation of what others' mental states are understood to be. Agents 'simulate' the mental states of others by running similar kinds of neural processes that they would if they were experiencing those mental states first hand.[41] This is something that, under most interpretations of the theory, occurs at a lower level than consciously emulating the states of others by 'putting oneself in their shoes'. According to many theorists, such as Gordon, it is usually sub-personal, and it is a process

[37] For an example, see Fodor (1981).
[38] See Stich and Nichols (2002), and Nichols (2003).
[39] See section 3 of this chapter.
[40] See Heal (1986) and Gordon (1986).
[41] For classic examples of simulation theory, see Davies and Stone (1995), Goldman (1989, 1991), Gordon (1995), and Harris (1989, 1991, 1995).

that is not accessible to introspection.[42] Examples of simulation include attributing fear to an agent on the basis of seeing their facial expressions and then simulating it internally, a process that leads to the judgement that the agent is afraid of something. The nature of this kind of simulation, and its neural underpinnings, vary vastly across the different accounts of simulation theory. The nature of these theoretical differences will not be discussed here. For the purposes of this chapter, it is sufficient simply to note that the very idea of 'simulation' is a matter of debate, with the one constant seeming to be that it is a low level mental operation involving mental processes that simulate the perceived mental processes of other agents, in order to understand their behaviour.[43]

Despite being developed as a competitor to the theory-theory, the idea that folk psychology involves a kind of mental simulation complements the idea that it is also an inbuilt theory that people use to predict and explain behaviour, in what are known as 'hybrid theories'. In hybrid theories, it is claimed that the way in which people interpret the behaviour of others is part theory-like and part based on mental simulation. The exact explanation of what being part theory-like and part simulation varies radically in different interpretations of folk psychology, and there are many such interpretations.[44] These theories are now the norm in contemporary interpretations of folk psychology, leaving out more traditional interpretations.[45] However, there are a few dissenting voices who argue that folk psychology involves neither theory nor mental simulation, one of which will now be discussed.

[42] See Gallese and Goldman (1998) and Gordon (2004).
[43] See Gordon (2009) for a discussion of the differing interpretations of the simulation theory.
[44] For some examples of accounts of folk psychology that advocate hybrid interpretations see Bach (2011), Botterill and Carruthers (1999, p. 89), Currie and Ravenscroft (2002), Goldman (2006), Goldman and Lucy (forthcoming), Mitchell (2005), Mitchell, Currie, and Ziegler (2009), Nichols and Stich (2003), Perner and Kuhberger (2005), and Stich and Nichols (2003).
[45] See Bach (2011), for a particular hybrid account, a description of how hybrid theories have become the dominant theories of folk psychology, and an account of the differences between types of hybrid theory.

2.4. The Narrative Practice Hypothesis

Hutto's narrative practice theory of folk psychology differs significantly from the mainstream interpretations of folk psychology that have just been described. Hutto argues that humans come to develop a folk psychological framework through encounters with narratives in their childhood. For him, the roles played by mental phenomena in such narratives, particularly beliefs and desires, allow children to come to understand the reasons that motivate others to act in certain ways and allow them to give an account of their own reasons for acting.[46] Hutto's theory is extremely exclusive. It requires linguistic competence to develop it, and it may only apply in western societies. His reasons for thinking this is so are that he argues that those who are capable of having folk psychological capabilities must meet the following conditions:

(i) A practical understanding of the propositional attitudes;

(ii) A capacity to represent the objects that these take – propositional contents as specified by that-clauses;

(iii) An understanding of the 'principles' governing the interaction of the attitudes, both with one another and with other key psychological players (such as perception and emotion);

(iv) An ability to apply all of the above sensitively (i.e. adjusting for relevant differences in particular cases by making allowances for a range of variables such as the person's character, circumstances, etc.).[47]

[46] Hutto (2007, 2008a, 2008b, 2009) explains his theory in a variety of different publications. For the most extensive account see Hutto (2008a).
[47] Hutto (2008a, p. 24).

For Hutto, interpretations of folk psychology as a theory and/or a form of simulation cannot explain how people can come to fulfil these four requirements, but his theory can. In particular, he argues that such theories struggle to deal with the last two conditions.[48]

A basic analysis of Hutto's interpretation of folk psychology would seem to leave out attention, as Hutto argues that a belief-desire pairing is all that is needed to explain the reasons why an agent acts in particular circumstances.[49] However, if the third condition that Hutto claims folk psychological theories need to fulfil is taken into account, it does not. Attention would need to come under the category of being one of the 'key psychological players', and so would form a part of his greater interpretation of the kind of understanding the folk have and use in their narrative practice in order to communicate with others. Broadly speaking, Hutto holds that, in order to explain the reasons people have for acting in certain ways, folk psychology is a very complex, structured narrative practice that requires not only an ability to use the propositional attitudes, such as beliefs and desires, but also a working understanding of all mental phenomena and the role that they play in conjunction with other mental phenomena.[50]

With the preceding description of Hutto's theory, an up to date knowledge of the major theories of folk psychology available has been provided. Most of these theories will now be rejected, on the basis that they incorporate a phenomenon known as 'mindreading' in their accounts of what folk psychology is. The two that remain as acceptable accounts of folk psychology will be Hutto's theory and Lewis' version of the theory-theory. The interpretation that both these theories have of (i) the means by which the content of folk concepts can be determined, and (ii) the relationships that folk concepts have to different fields of enquiry,

[48] Ibid, pp. 24-25.
[49] Ibid, p. 1.
[50] Ibid, p. 28.

will then be described. With this, the groundwork for identifying the folk concept of attention and its relevance to different fields of enquiry will be provided.

3. Rejecting mindreading theories of folk psychology

Mindreading is the ability that people have to attribute mental phenomena to others in order to, among other things, predict and explain their behaviour.[51] This is something that most people engage in every day and, even with regard to extremely complicated behaviour, are able to do so to a high degree of accuracy. Take, as a common example of mindreading, the capacity to know when somebody is 'irritable' and to know that, as a result of it, they are likely to snap at a flippant comment over which they would otherwise not be affected. Stephen Stich and Shaun Nichols have argued that it is likely that the concepts and principles that underpin mindreading differ from those that are used when mental terms are drawn upon in everyday discourse.[52] They base this argument on the fact that mindreading involves the use of principles and concepts that are inaccessible to the agents who use them, in contrast to the concepts people express when they use mental terms in everyday discourse. In what follows, this argument will be explained and then endorsed.

As a result of the above argument, one assumption held by almost all modern theories of folk psychology will then be rejected. This is that folk psychology involves mindreading. To reject this, it will be stressed that folk psychology necessarily comprises what the folk believe their own and others' minds are like. This will provide the basis for rejecting mindreading as part of folk psychology, as the folk will be shown not to believe in principles and concepts that they have no access to – such as those that are used in mindreading. Rather, they will be demonstrated to believe in those concepts that they do have access to, which are those that

[51] Stich and Nichols (2003, pp. 240-241) Nichols (2002).
[52] Ibid.

they draw on in everyday language with mental terms. As a result of this, the great majority of modern interpretations of folk psychology will be rejected as adequate accounts of folk psychology given that they study mindreading, and not mental terms.

3.1. Mental terms and mindreading differ

To begin their argument, Stich and Nichols identify empirical evidence that shows that many of the cognitive capacities possessed by humans, such as face recognition, decision-making, and folk physics all involve principles that are inaccessible to the agents that use them.[53] They claim that mindreading operates in the same way, in that it involves concepts and principles that are inaccessible to people when they draw on them. They argue that, instead of being something engaged in by agents with any understanding, mindreading operates on concepts and principles determined by sub-personal mechanisms, mechanisms over which agents have no control. Under this interpretation, these mechanisms automatically attribute certain mental phenomena to others in response to certain stimuli, the attribution of which can allow for, among other things, others' behaviour to be predicted and explained.[54] This argument is supported by Stich and Nichols' use of well-worn empirical evidence, such as the fact that people attribute complex emotions and goals to others on the basis of slight changes in the muscle movements of others' faces or determine that people are lying on the basis of a variety of subtle visual cues.[55] This kind of attribution is something that both Stich and Nichols stress contains information that people are unlikely to 'recognise or assent to'.[56] It is something that, they claim, people are not aware of and that it is unavailable to introspection. They hold that all of us perform it, and there is no way not to engage in this activity, as it is performed by brain mechanisms over which we have no control.

[53] Stich and Nichols (2003, p. 241).
[54] Ibid, p. 241-242.
[55] See Stich and Nichols (2003, pp. 240-241) and Nichols (2002).
[56] Stich and Nichols (2003, p. 241).

From the aforementioned Stich and Nichols argue that it is likely that far more complex phenomena are attributed to others through mindreading than those that are described when mental terms are used in everyday language. They argue this due to the fact that the sub-personal attributions made through mindreading are generated by the use of information that people are unaware of and are unfamiliar with, in stark contrast with the kind of information that people draw upon in everyday language when they use mental terms.[57] As will now be explained, there is good reason to support this argument.

When people use mental terms in everyday language, they draw on items of what Lewis calls 'common knowledge among us—everyone knows them, everyone knows that everyone knows them, and so on'.[58] In contrast, the empirical evidence indicates that the kind of information that is involved in mindreading comes in the form of subtle cues picked up by brain mechanisms, such as small pieces of visual information, tiny alterations in tone of voice of others, alterations in their posture, and other things. All of this is picked up well below our level of conscious awareness.[59] In other words, this kind of information is not 'common knowledge among us' that 'everyone knows' about. Even the nature of the process of attributing mental phenomena to others on the basis of this information is something that the evidence suggests people are unaware of.[60] To conclude that the content of the attributions made through mindreading, and those made through the use of mental terms align in any substantive way, given these stark differences, seems to be a hard task indeed. This point is accentuated by the differences between the goal of mindreading and the goal of everyday language.

Mindreading allows people to predict and explain complex behaviour, to a high degree of accuracy, in reaction to a wide variety of subtle information. Hence, the attributions made

[57] Ibid.
[58] Lewis (1966, p. 100) and (1972, pp. 207-208).
[59] See Stich and Nichols (2003, pp. 240-241) and Nichols (2002).
[60] Ibid.

through mindreading need to be complex, in order for people to be able to adequately predict and explain this kind of behaviour. On the other hand, any term that is used in everyday language is used to communicate with others effectively. Effective communication requires concepts that can be employed in a wide variety of contexts, and they have to have a degree of breadth, even simplicity, to be able to do this. The use of complex attributions in such everyday language would likely impede effective communication. As a result, it seems far more likely that different, much simpler attributions of mental phenomena are made in everyday language than those attributions that are made through mindreading, given the goal of the two.

Stich and Nichols' argument is not only supported by empirical evidence. As will now be explained, it is also supported by our experience. Often, in everyday life, it seems as if the behaviour of other people, often rather complex behaviour, can be anticipated to a reasonable degree of accuracy, without any clear understanding of the nature of the particular mental phenomenon, or set of phenomena, that produces it. For example, think of cases in which we can somehow tell that a partner, close friend, or family member is in a particular 'state of mind' at a given time. In these cases, we seem aware that the person has a propensity to act in particular way, given the way that they appear to us at that time. This may be on the basis of their posture, the expression on their face, the way they are moving, if they are biting their nails, or things about their experience that we cannot adequately explain but of which we seem to be aware. Moreover, it is also possible to recognise some aspects of how that person is feeling at that time and know (somehow) how this kind of feeling will cause them to behave in certain ways. However, it is often very difficult to describe what kind of mental state, or set of them, is causing that behaviour or can explain that behaviour. In these cases, it is easy to say that we just know that person, and we know that, given particular cues (at least the ones that we are aware of), we can tell that they are going to behave in certain ways.

The reason cases like those just described give support to Stich and Nichols' argument is that the behaviour that we anticipate in such cases is often so specific that there seems to be no adequate way to put into words what mental phenomenon, or set of them, is causing the behaviour or how it is causing the behaviour. This is not to say that it is impossible to describe the reason for the behaviour in general terms by saying that they are 'anxious', 'focussed', 'irritable', 'happy', or any number of other things (although it is often difficult to do so). One can. However, attributing the person with states using these terms does not allow us to predict their behaviour to a high degree of accuracy. In these cases, the behaviour of the person is anticipated, quite accurately, on the basis of some strange sense of how they will act, given the way that they appear to us. It is difficult to describe how we have this sense, and what it is a sense of, more than one of us perceiving them appearing a certain way. In particular, what we are sensing within that person is something that is so particular, and so specific to them, that it does not seem to be able to be accurately captured by an everyday mental term in any more than a general sense. Mindreading and our mental terms seem to come apart in our own experience. To clarify this notion, an example will now be provided.

Some people are often socially awkward at gatherings. In these cases, we can identify that such people will have difficulty acting like 'their normal selves' and will be disposed to react strangely under the circumstances. However, the wide sets of behaviour shown by different people who are socially awkward are huge. For example, consider an individual who is likely to be louder or more talkative than normal, at a social gathering. In this case she talks quickly and erratically, flitting randomly from topic to topic, and involves herself in all the conversations she can. Conversely, consider an individual who is very shy in these circumstances. He may not say a word to others unless prompted and talks in short, pained sentences when he is. Interestingly, if we posit that both people are 'anxious' in these

circumstances, we can describe why they act in the ways that they have. Moreover, it seems perfectly accurate to describe both kinds of behaviour as manifestations of what we call 'anxiety'. However, using the term 'anxiety' in these cases does not seem like something that can accurately explain either set of behaviour or the differences between them. It just identifies the disposition of that individual to act differently from their normal set of behaviours due to the unpleasant feeling we call 'anxiety'. However, if we know either individual, or see some behavioural cues from them, we can predict their behaviour in an accurate and meaningful way. This prediction is based on a sense of what that person will do specifically, and it is not something that we infer from the term 'anxiety'. Importantly, it seems very difficult to describe this sense or what it is of. So, as can be seen from examples like this one, there is even a difference in our experience between the phenomena mindreading picks out and those that mental terms do.

Stich and Nichols have developed an important argument. It demonstrates that there is a likely disconnection between the way mental terms are used and the way that mindreading occurs. Both empirical evidence and our experience support the idea that we attribute complex mental phenomena to others at the sub-personal level without any understanding or awareness of how this process occurs. As the attributions involved in this kind of process seem to go beyond anything that is picked out with the mental terms that are used in everyday discourse, the best explanation is that the attributions we make in mindreading, and the attributions we make with mental terms in everyday discourse are different. Given this, the position that will be taken here is that the two are different.

Mindreading and not mental terms have been studied in most modern theories in an attempt to determine the nature of folk psychology. This is the case, as evidence about the way people make folk psychological attributions tends to be gathered by looking at the way people, particularly children, react to stimuli in certain circumstances. This experimental

evidence focuses on understanding the kind of mechanisms that guide our understanding of others in ways of which we are not necessarily aware or would be able to describe.[61] In other words, this empirical evidence concerns mindreading. It will now be argued that, because most accounts of folk psychology are based in this way upon mindreading, they are not adequate accounts of folk psychology. If folk psychology is to be understood as the body of information that the folk believe about their own and others minds, mental terms rather than mindreading fit within folk psychology.

3.2. Mental terms, not mindreading, fit within folk psychology

If the phenomena people describe when they use mental terms in everyday language and those that they attribute to others while mindreading differ substantially, then the mental phenomena that people attribute to others when engaged in mindreading should not be considered in terms of 'beliefs', 'desires', 'attention', 'thoughts' or anything like what people express when they interact with each other in everyday discourse. The attributions involved in mindreading would be those of complex mental events that do not have a close relationship with the kind of mental phenomena people describe in everyday discourse. As was argued, the empirical evidence does suggest there is a disparity between mindreading, and the way that people use mental terms in everyday discourse, meaning that this should be considered to be the case.[62] So, in order to determine what kind of attributions are the best fit for the folk psychological understanding of the mind, the complex attributions made through mindreading and the attributions made in everyday language need to be explored further and assessed.

[61] For some examples of data that reflect sub-personal and complicated attribution of mental happenings made in order to predict and explain behaviour of others see Schneider et al. (2012a, 2012b) for a general analysis. For the attributions of beliefs, see Clements and Perner (1994), Kovacs et al. (2010), and Onishi and Baillargeon (2005). For the attributions of intentions see Csibra et al. (2003), and Woodward (1999).
[62] Ibid.

To achieve this it will first be demonstrated that people think that those phenomena which they attribute to themselves and others by using mental terms in everyday discourse exist. Then, it will be argued that the folk would deny the existence of those complex phenomena they attribute to others through mindreading. This will lead to the rejection of mindreading as part of folk psychology and the acceptance of everyday mental terms, given that folk psychology, as it is understood here, is the body of information that the folk believe about their own and others' minds. Correspondingly, most modern theories of folk psychology will then be rejected as adequate accounts because they study mindreading and not mental terms. This will leave two remaining accounts as adequate depictions of folk psychology, and this identification will allow the next section of the thesis to begin.

To begin, the folk hold that the mental phenomena they pick out in everyday discourse exist. This can be seen through the fact that if a member of the folk were to be asked if they thought that the things they describe when they say they are 'thinking' or when they talk about their 'desires' actually exist, they would say 'of course they do!'. The folk clearly believe that these phenomena, in the way that they describe them, exist in a particular form. They think of themselves and others as minded, with sets of 'desires', 'beliefs', and 'emotions' and with the capacity to 'love' and give their 'attention' to things. Moreover, they think that they pick these things out whenever they use mental terms and that there is nothing too imprecise about this procedure. Evidence for this position could come from an empirical study of the reaction non-experts have to a variety of questions about whether the things they call 'anger', 'beliefs', 'anxiety' and other things actually exist. However, this hardly seems necessary. If the folk did not believe that these things exist, these things would not form such a massive part of their day to day interactions. Every day, people claim that they are 'anxious' or 'happy', that they 'believe' in a certain state of affairs applying, that they have particular sets of 'desires', and that they 'love' their partner and family. Moreover, these things are

stated with conviction, and they are stated with conviction often. It seems strange to say that the majority of people who say these things do not think the content of what they are saying actually refers to anything. Therefore, the position taken here will be that the folk hold that the things they pick out with mental terms in everyday language exist.

In contrast to the things the folk pick out with mental terms, the folk do not intuitively believe that the phenomena they attribute to others while mindreading form part of their own, or others' minds, given that they are not aware of attributing such phenomena to others, and do not know what these attributions consist of. The reason for this is that, if something is not accessible through introspection, the folk will not believe that it is true, and so it will not be able to form a part of their personal level understanding of the world. This can be demonstrated through the analogous case of the cognitive biases that people have. Empirical evidence shows that many people have racist and sexist cognitive biases that would disgust them.[63] Like the attributions made through mindreading, these biases are not accessible to these people through introspection and are determined by immediate sub-personal reactions to stimuli. Importantly, these biases are things that such people would undoubtedly deny having if we were to ask them. For these people these things are certainly not things they consider to be part of who they are, because they never experience enacting them, and they do not seem to be a part of the way in which they interact with others. In the same way, the folk will undoubtedly deny that they draw on principles and concepts involved in mindreading in their everyday lives and that these principles and concepts constitute their understanding of their own and others' minds, if they cannot introspect on them.

The folk intuitively think of others as minded in the same way as they are, as people with sets of beliefs and desires, thoughts and emotions, not as people they posit with complex sets of mental events, based on tiny changes in things like the muscles on their faces. They

[63] See Amodio and Devine (2006), Banjali and Greenwald (1994), Dovidio et al. (2009), Nosek et al. (2007), Petty et al. (2009).

never experience these attributions being made, and they have no awareness of what they are like. Ipso facto, they do not believe that they actually make these attributions. As such, similarly to the cognitive biases people have, the principles and concepts that people use in mindreading do not form part of the way the folk believe their own others' minds operate. The folk will not endorse such principles and concepts because they cannot introspect on them. Indeed, just as Stich and Nichols state, the attributions of mental phenomena made while mindreading are things that most people 'cannot recognise or assent to'.[64]

It can be extrapolated from the above that folk psychology concerns the attributions of mental phenomena that are made when mental terms are used in ordinary language, and it does not concern attributions made through mindreading. This is the case, as if folk psychology is to be considered as 'the body of information that the folk – namely those without psychological or philosophical training – believe about their own and others minds', and the folk do not believe in the attributions made through mindreading, yet do believe in those made in everyday language, then only the attributions made in everyday language fit within folk psychology.

The argument provided here is manifestly semantic, based on a particular interpretation of what folk psychology is. Nevertheless, it is an argument that should be accepted. It is odd to say that the process of mindreading, which guides all people at the sub-personal level, people which include neuroscientists, empirical psychologists and philosophers, constitutes folk psychology. Such specialists are not members of the folk, and if they draw on mindreading as much as the folk do, in the same way that the folk do, mindreading should not be considered as part of an account of what folk psychology is. Moreover, the folk have no theoretical knowledge of mindreading, and mindreading is something that they are unaware of engaging in. The concepts involved in it are alien to them.

[64] Stich and Nichols (2003, p. 141).

As such, mindreading should not be considered as something that comprises the body of information that the folk endorse about their own and others minds. In contrast, the things mental terms pick out, as they are used in everyday discourse, are things that the folk believe exist. Moreover, they are things that many specialists deny exist or will, at least, question the existence of. Given this, the things mental terms pick out are an appropriate interpretation of the things that folk psychology is about, as the folk believe in them, and they are not necessarily endorsed by specialists such as empirical psychologists, neuroscientists, and philosophers. Thus, it is better to hold that folk psychology is determined by the way mental terms are used in everyday discourse, rather than by the way mindreading occurs, given that such an interpretation preserves the integrity of meaning of 'folk psychology' as something that is held by the folk. This will be the position taken in what follows.

Most modern accounts of folk psychology, like theory-theory accounts, simulation theory accounts, and hybrid theories, are all concerned with mindreading and not with the way mental terms are used in everyday discourse.[65] This means that these theories cannot be considered as adequate accounts of folk psychology. The problem with such theories is that they have become so focussed on determining the fundamental nature of how people actually predict and explain the behaviour of others (among other things), that they have forgotten what actually comprises folk psychology. It is the body of information that the folk endorse concerning what their own and others minds are like. It is not about the way people, folk or not, predict and explain the behaviour of others in ways that they are not aware of. Of course, none of this is to discredit the veracity of these theories in relation to their description of how people engage in mindreading, and how they come to predict and explain the behaviour of others to a high degree of accuracy as a result of it. They are based on the latest empirical evidence concerning how people engage in mindreading and must be considered the best

[65] See Ravenscroft (2010) and Gordon (2009) for a broad account of the major folk psychological theories and how they have focussed on mindreading over the past thirty years.

available accounts of this phenomenon.[66] The point of the argument here is to show that these theories cannot rightly be called accounts of folk psychology.

Ultimately, the way that the people actually do things like predict and explain the behaviour of others is not compatible with the way non-experts think that they do. Empirical evidence shows that the means by which this is done is far more complex than non-experts realise that it is.[67] What people actually do, in order to do things like predict and explain the behaviour of others, seems to involve the sub-personal attribution of mental phenomena to others, the content of such attributions being determined by combination of theory-laden elements and the simulation of others' perspectives.[68] This is something that non-experts are not aware of and is a process that is totally alien to their experience of the world. As has been argued, folk psychology is not constituted by the way people actually predict and explain behaviour, nor any other any other cognitive capacities that people apply in mindreading, but rather is constituted by the way non-experts understand their own and others' minds. This means that sophisticated theory-theories, simulation theories, and hybrids of the two, which identify how mindreading occurs, do not constitute adequate accounts of folk psychology. If anything is an adequate account of folk psychology it must be a theory that describes folk psychology as a body of knowledge that comprises the understanding that non-experts have of their minds and others' minds. As was put forward earlier, the folk endorse the notion that the things they pick out with mental terms in everyday discourse are part of their own, and others' minds. Given this, only a theory that holds that the content of folk psychology is determined by the way mental terms are used in everyday discourse can capture the nature of folk psychology.

[66] They can easily, and justifiably, retain their other common moniker – 'theory of mind'.
[67] See Stich and Nichols (2003) and Nichols (2002).
[68] See Bach (2011), Botterill and Carruthers (1999, p. 89), Currie and Ravenscroft (2002), Goldman (2006), Goldman and Lucy (forthcoming), Mitchell (2005), Mitchell, Currie, and Ziegler (2009), Nichols and Stich (2003), and Perner and Kuhberger (2005), and Stich and Nichols (2003).

As a result of the argument here, there are only two theories of the nature of folk psychology that remain as viable interpretations. These theories are the Narrative Practice Hypothesis and the variant of the theory-theory proposed by Lewis. Both these theories, in their own way, put forward the notion that folk psychological concepts are determined by the way mental terms are used in everyday discourse. Both, therefore, accord to the everyday intuitions people have about their own and others' minds.[69] In what follows, it will be shown that these theories both (i) advocate the same means by which the content of folk psychological concepts can be determined and (ii) give folk concepts the same relevance to those in other areas of enquiry. With this, the information required to bring out the folk psychological concept of attention and to determine the relevance it has to other areas of enquiry will have been identified. It will be seen that both acceptable interpretations of folk psychology give the same accounts of each.

4. Identifying (i) and (ii)

Given the argument in the previous section, there are only two remaining theories that provide acceptable accounts of folk psychology. The first of these theories is Lewis' theory-theory interpretation of folk psychology. The second is the Narrative Practice Hypothesis. In what follows, it will be made clear that there is insufficient evidence to endorse one theory over the other. Then, it will be demonstrated that there is no reason endorse one over the other.

The aim of this part of the chapter, identified at the outset, was not to determine the best account of what folk psychology is, but rather to identify (i) the means by which the content of folk psychological concepts may be determined, and (ii) the relationship folk psychological concepts have to different fields of enquiry. The interpretation of both these points will be argued to be the same under either theory, and, given that these two are the only

[69] See Lewis (1966, 1970, 1972) and Hutto (2007, 2008a, 2008b, 2009).

remaining theories of folk psychology that are acceptable, this is the interpretation of these points that will be endorsed. This will mean that the information required to identify the folk concept of attention will have been acquired, and that the process of identifying it can begin.

4.1. More evidence is required to identify the best account of folk psychology

There is no substantive body of evidence to show that Hutto's theory is accurate, which he readily admits.[70] Ultimately, Hutto's theory is a form of 'observational philosophy' that provides a series of untested claims.[71] Any theory needs to have its observational claims tested, as what can seem manifest on observation can prove to be radically wrong in reality. There is no substantive body of evidence to show that Lewis' theory is correct either. Testing of the theory-theory only actually delivered an analysis of the way people actually predict and explain the behaviour of others through mindreading. This, of course, is something that has been argued to be unrelated to the folk theory. There needs to be a comprehensive analysis of the way people use all mental terms in ordinary language to determine if folk concepts belong to a linguistic theory, in Lewis terms, or if they are better understood as part of a narrative practice.

The issue here is that more empirical evidence is required in order to endorse the account of folk psychology provided by one theory over that of the other. As it stands, this evidence is not available, and so neither of these theories can be endorsed over the other. This would be a weak position to hold if the goal of this part of the chapter was to identify the most accurate interpretation of the nature of folk psychology. Fortunately, it is not. The goal of this part of the chapter is to determine the most accurate account of points (i) and (ii). As will now be explained, as both of these theories provide the same interpretation of point (i)

[70] Hutto (2007, p. xi)
[71] Ibid.

and (ii), and as they are together the only acceptable candidates for an account of the nature of folk psychology, then this is the most accurate account of (i) and (ii) available.

4.2. The interpretation of (i) by the two theories

Lewis, in two different papers, states that the way to determine the content of the folk psychological theory is the following:

> Collect all the platitudes you can think of regarding the causal relations of mental states, sensory stimuli, and motor responses. Perhaps we can think of them as having the form:
>
> When someone is in so-and-so combination of mental states and receives sensory stimuli of so-and-so kind, he tends with so-and-so probability to be caused thereby to go into so-and-so mental states and produce so-and-so motor responses. Also add all the platitudes to the effect that one mental state falls under another—"toothache is a kind of pain" and the like.
>
> Perhaps there are platitudes of other forms as well. Include only platitudes which are common knowledge among us—everyone knows them, everyone knows that everyone knows them, and so on.[72]

In the sentence "[p]erhaps there are platitudes of other forms as well", Lewis admits the possibility that there are platitudes that do not play a causal role in everyday psychological explanations. This seems wrong, given Lewis' overall position. For Lewis, all theoretical terms gain their meaning and reference from the causal role they play in the theory in which they are used. As has been explained, Lewis interprets folk psychology as a theory.[73] Seemingly, he should argue that the only means to identify folk concepts is to identify the causal role that mental terms play in everyday psychological explanations, as they are the

[72] Lewis (1966, p. 100) and (1972, pp. 207-208).
[73] Lewis (1966, 1970, 1972).

theoretical terms of the folk theory.[74] This may have been a minor slip by Lewis, as Ravenscroft has claimed.[75] Whatever the case, are there platitudes involving mental phenomena that do not play any causal role with relation to behaviour or other mental states? And are they meaningful? If so, this would deny the notion that the content of folk psychological concepts is determined by the causal role that they play in everyday psychological explanations, given that people would then draw upon mental concepts in a meaningful way without them playing such a role. Importantly, such a result would make Lewis' interpretation of folk psychology as a theory extremely questionable, given that folk concepts would not be theoretical concepts in the way that Lewis understands theoretical concepts. As was said before, this is an empirical matter. It would take sustained research of everyday platitudes about all different folk phenomena to resolve, and this research will not be carried out here. However, as will now be demonstrated, Lewis' simple claim in the passage just quoted, which is that folk concepts can be identified through a general analysis of platitudes involving mental terms in everyday language, is compatible with both his interpretation of folk psychology and the Narrative Practice Hypothesis, thus providing the identification of (i).

Under both Lewis' interpretation of the theory-theory and the Narrative Practice Hypothesis if all of the platitudes about attention were gathered, and the information that they provide about attention were determined, then an account of the content of the folk psychological concept of attention should be provided. This is the case, even though there would be differences in the content of the concept arrived were either interpretation of folk psychology deemed correct, as under one interpretation the concept is part of a theory, with only functional attributes, and under the other it is part of a narrative practice.[76] Ultimately,

[74] Ibid.
[75] Ravenscroft (2010).
[76] Some aspects of what is identified here may go beyond what is expected by Lewis' variant of the theory-theory because a broad analysis of mental terms may identify aspects of the folk concept that go beyond the role attention plays in everyday

both theories hold that people pick out folk psychological phenomena when they use mental terms in everyday discourse. Therefore, under these interpretations, the content of folk concepts should be able to be determined through an analysis of the way mental terms are used in everyday discourse (or as Lewis calls it an analysis of the everyday 'platitudes' involving mental phenomena). That is, the account of point (i) by both theories is that the content of folk concepts can be determined through an analysis of the way mental terms are used in everyday language. Given that both theories are the only acceptable accounts of folk psychology left available, this account of (i) will be endorsed. In the next section of the thesis, an explicit ordinary language methodology in line with this will be explained. With it, a coherent concept of the folk concept of attention will be arrived at.

4.3. The interpretation of (ii) by the two theories

Under Lewis' account of the theory-theory and the Narrative Practice Hypothesis the interpretation of (ii) is the same. Under either theory the understanding of (ii) is that folk concepts are explananda for those in neuroscience, empirical psychology, and philosophy. An explanation of how this is the case will be achieved first by identifying that the status of such concepts is the same if either theory is endorsed as the best account of folk psychology and then by showing that, owing to this status, folk concepts are explananda for more sophisticated areas of enquiry.

If Lewis' interpretation of the theory-theory is endorsed, then the question arises as to whether it is a good theory that accurately accounts for how our brains work.[77] As will now

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psychological explanation. However, such a result would be a problem for this variant of the theory-theory and not for the analysis that follows. If it does occur, it shows that our mental terms are meaningful beyond the role they play in everyday psychological explanation and that Lewis' theory-theory does not adequately depict the nature of folk concepts.

[77] In the 1980s and early 1990s, the debate as to whether folk psychology is a bad theory that needs to be eliminated or a good theory was at its apex. Notable figures who argued for elimination include P.M. Churchland (1981, 1988), P. S Churchland (1986), and Stich (1983). Notable figures who argued that it is a good theory include Baker (1987), Boghossian (1990, 1991), and Jackson and Pettit (1990). The debate has now died down somewhat, perhaps due to the dominance of hybrid theories, which seem to be more easily reduced, or are not candidates for elimination, given their complicated semi-theoretical make-up.

be explained, it should not be considered a theory that does. One of the roles of the theory is to predict and explain the behaviour of others. For example, people draw upon folk concepts in everyday language to explain why people have acted in certain ways (i.e. 'she ran away from the wolves because she was afraid of them'). However, as has already been demonstrated, at the most basic level, people do not draw upon the folk theory in order to predict and explain the behaviour of others, but rather they engage in mindreading, a process that involves the use of more complex concepts. So, the folk theory is not the most fundamental vehicle through which people predict and explain the behaviour of others. Instead, it is a theory that plays this role in a more superficial and less accurate way, in everyday discourse. Given that the folk theory is superficial in this way, to expect that the theoretical posits of the theory actually pick out brain mechanisms accurately (some of which underpin mindreading) seems to be too much to ask too much of the folk theory. As it stands, if Lewis' interpretation of the theory-theory is the best account of folk psychology, the eliminativism of those like Paul and Patricia Churchland looks very powerful, and Lewis' theory should probably be eliminated in favour of a more accurate one, that more accurately depicts what our brains are like.[78]

Despite what has been said, the folk psychological theory, and so the folk concepts that make it up, still have some value under Lewis' interpretation, even if the theory is eliminated as an account of how our mind/brain works. As was argued earlier, the folk hold that the referents of the mental terms that they use in everyday discourse exist. So, if Lewis is right and folk psychology is a theory, albeit a bad one in many ways, it is still one that is representative of the more basic intuitions that people have concerning their own and others'

[78] Dennett (1991), although somebody who holds that propositional attitudes do not actually exist, does not think that folk psychology is really a theory, so this differentiates him from those like Patricia (1986) and Paul Churchland (1981, 1988), who do. The Churchlands are probably the best example of eliminativists who think that folk psychology is a bad theory that needs to be eliminated and replaced by more accurate theory that maps onto the way our brains work. If Lewis' theory-theory interpretation of folk psychology is the best interpretation of folk psychology, then the Churchlands brand of eliminative materialism also seems to be the most accurate interpretation of the status of folk psychology, given that existing evidence suggests that Lewis' Theory-Theory interpretation of folk psychology is of folk psychology as a bad theory.

minds. Moreover, the failure of such a folk psychological theory, as it concerns picking out how people actually predict and explain behaviour, and as it concerns identifying our underlying neural architecture, is, in a strange way, one of its strengths. Any account of the way that people actually predict and explain behaviour, or any account of the way that the brain actually works, is likely to be so complex that trying to express what is going on in any particular instance of human behaviour by drawing on the theoretical terms of such theories would likely impede effective communication. The theories, to be accurate, will likely need to be so complicated, and the range of information that they incorporate so diverse, that there is very little likelihood that any individual will be able to apply the terms of such theories comfortably or be able to communicate effectively using them in any given context. If folk psychology is a theory in Lewis' terms, on the other hand, it is something that is comparatively simple, has terms that have a wide range of application in different contexts, can transfer general information about the dispositions people have to certain actions, and can capture some aspects of the experience of a particular individual at a given time.[79] The fact that mental terms are currently the cornerstone of everyday communication supports this position. Thus, the role of folk psychological concepts that are parts of this theory can be argued to be tools which the folk use for communication, tools that represent how the folk intuitively understand their own minds and those of others.

Under the interpretation of folk psychology provided by the Narrative Practice Hypothesis, just as with Lewis' theory, folk psychological concepts are communicative tools that should not be expected to refer accurately to brain mechanisms. Under this kind of interpretation of folk psychology, folk psychological concepts exist in order to provide the capacity for people to understand reasons for action.[80] The concepts involved in this practice should not be expected to identify anything in our brains, as this is far more likely to be more

[79] Lewis (1966, p. 100) and (1972, pp. 207-208).
[80] Hutto(2007, 2008a, 2008b, 2009).

complicated than that. The core aim of such concepts is to transfer information to others, and to help people understand their own behaviour and that of others. They can be simply considered to be communicative tools under this theory. As with Lewis' interpretation of folk psychology, such concepts are also representative of the most basic intuitions that people have about their own and others' minds. It is these things that, as has been stressed, are the things that non-experts would endorse as representative of what their own and others minds are like, and so these things represent the most basic intuitions that people have about their own and others minds. This is something that is consistent with both Hutto's theory,[81] and Lewis' theory.[82] Indeed, it is something that any account of folk psychology will need to be compatible with if it is to provide an adequate account of folk psychology – the body of information that the folk believe about their own and others minds.

As has just been explained, under both acceptable interpretations of folk psychology, folk concepts should not be expected to pick out brain mechanisms accurately. They should be considered as communicative tools, the content of which express the way that the folk intuitively understand their own and others' minds. The result of this conclusion for the way folk concepts are interpreted by those in other fields of enquiry will now be explained, beginning with the relevance of folk psychological concepts to the sciences.

First, under the understanding of folk concepts endorsed by Lewis' theory or the Narrative Practice Hypothesis, folk psychological concepts cannot be expected to refer accurately to anything in our brains. Therefore, the phenomena studied by those in the sciences should be expected to go beyond what these folk concepts pick out, phenomena that have no one-to-one relationship to things that non-experts call 'beliefs', 'desires', 'emotions', or 'attention'. Such phenomena are likely to be brain mechanisms that have far more specific and complex roles in terms of regulating our behaviour, accessing and processing various

[81] Hutto (2008a).
[82] Lewis (1966, 1970, 1972).

kinds of information, and so on, than the things that the folk pick out with mental terms in everyday discourse. Given this, the things picked out by folk psychological concepts will not be things that those in cognitive science and empirical psychology should aim to identify through their research. Second, folk concepts are things that those in the sciences should explain, if the research in these fields is to be accessible to the folk.[83] In order for the folk to have a clear understanding of what our brain mechanisms do, the way such mechanisms operate needs to be described in terms of things that explain folk concepts (i.e. 'what we think of as our attention in circumstances a, b and c are actually brain processes x, y, and z, interacting with process p'). This is the case, as the folk can only understand the complex aspects of the way our brains work if they are explained in relation to a set of communicative tools that they possess. These are the mental concepts that they intuitively draw upon whenever they interact with each other.

To sum up the previous paragraph, by explaining folk psychological concepts, empirical psychologists and neuroscientists can relate research concerning our brains to the general understanding that non-experts have of their minds. This is not to say that such research itself should necessarily focus on explaining aspects the way the folk understand their minds. It need not. It is only to say that it should, if the research is to be accessible to the folk. Given that making the advancements in these fields accessible to everybody is an intrinsically valuable aim to have, this task should be taken on board by those in these fields of enquiry.

Under the interpretation of folk psychological concepts by both Lewis' theory and the Narrative Practice Hypothesis, folk psychological concepts have relevance to the work of philosophers. If either theory is endorsed, then it is the role of the philosopher to come up with sophisticated concepts that can give a more accurate picture of our own minds than are

[83] It does not necessarily need to be. Just as high-level physics need not be accessible to the folk, high-level neuroscience or empirical psychology need not be either. However, in such cases, the phenomenon identified should not be expressed using the words the folk use to describe mental phenomena, in order to avoid everyday misinterpretation of scientific data.

found in the ordinary language concepts found in the kinds of folk psychology postulated by these theories. For example, as Adam Morton points out, philosophers have long been coming up with useful and accurate distinctions about the nature of mental phenomena that go well beyond what the folk are familiar with.[84] There are several examples of how philosophers can do this. First, philosophical interpretations of our minds based on conceptual analysis can provide an understanding of mental phenomena that accords with our phenomenal experience to a greater degree than that held by the folk. Second, they can come up with a more accurate understanding of the mind which can perhaps open the door for a reductionist understanding of the mind/brain that is unavailable in the folk interpretation of the mind. Finally, and related to the last point, they can determine whether mental concepts refer to anything at all or if they are just things which allow for ease of communication.

Folk psychological concepts, in the way they are understood in Lewis' and Hutto's theories, seem to be redundant for philosophers if what has just been said is true. Indeed, if the philosopher comes up with better concepts than those held by the folk, it could be argued that folk psychological concepts are useless. This would be correct, only if one aspect of the nature of folk psychological concepts, held by both Lewis' theory and the Narrative Practice Hypothesis, were to be ignored. Folk psychological concepts, under either theory, are representative of the most basic intuitions that people have about their minds. In this way, they are the starting point, or bedrock, from which conceptual analysis can happen. If this were not the case, theories concerning mental phenomena could be developed that use terms like 'perception', 'imagination', 'memory', and 'attention', that in no way relate to the most basic intuitions that people hold about them. Ultimately, the role of philosophers is to build upon folk concepts and improve them, in order to find out what mental phenomena are actually like, as opposed to the way they merely seem. Moreover, any good account of a

[84] Morton (2007, p. 215).

phenomenon will be able to correct the more basic intuitions held about that phenomenon, by explaining how reality differs from these intuitions. So, folk concepts are explananda for philosophers in a way that is even more pressing than it is for those in empirical psychology and cognitive science, as it is the role of the philosopher to explain the nature of our mind/brain, and to show why many of the more basic intuitions that the folk have about it might be misguided.

There is another reason that folk concepts, under the interpretation of these theories, are important to philosophers. Determining their content can provide a clear conceptual framework that neuroscientists and empirical psychologists can use to explain their data to the folk, making the role that they have much easier. Indeed, such frameworks may be more basic than sophisticated accounts of the mind but, as will be demonstrated with attention in what follows, folk psychological concepts are often anything but simple, and those in the sciences should not be expected to be able to express them readily given their expertise lies in other areas.

To sum up, the account of points (i) and (ii) are the same if either the Narrative Practice Hypothesis or Lewis' interpretation of the theory-theory is endorsed. Under both theories, folk psychological concepts have a content determined by the way mental terms are used in everyday language. Hence, the response to point (i) is that broad analysis of the way mental terms are used in everyday language is an acceptable method to determine the content of folk psychological concepts. Also, under both theories, folk psychological concepts should not be taken to be anything more than communicative tools that are representative of the most basic intuitions that the folk have about their own and others' minds. From this, it has been argued that these concepts are relevant to those in other areas of enquiry by being objects of explanation for them. Thus, the account of (ii), if either theory is endorsed, is that folk psychological concepts are explananda for those in philosophy, neuroscience, and empirical

psychology. Given that both these theories are the only acceptable interpretations of the nature of folk psychology, their interpretations of (i) and (ii) will be endorsed here. With this in hand, an explicit method for bringing out the folk psychological concept of attention will now be devised and then applied.

5. The method

Under the shared interpretation of folk psychological concepts provided by the two theories of folk psychology endorsed in this chapter, people draw upon folk psychological concepts in everyday language whenever they use mental terms. Examples are when they make statements such as 'I believe that s', 'I think that p', 'I hate f', or 'I intend to g'.[85] Given this, the folk psychological beliefs that people have concerning any mental phenomenon can be identified through an analysis of the way that terms that describe them are used in everyday discourse. This what will be done with attention in the next section, by looking at the various ways in which people use the term 'attention' in everyday discourse.[86] When the group of folk beliefs that people have concerning attention are identified, a unified, coherent account of them will be developed through fixing the reference of the term 'attention'. The basis for providing such a coherent account of these beliefs through fixing the reference of the term

[85] See Lewis (1966, 1970, 1972) and Hutto (2007, 2008a, 2008b, 2009).

[86] This is not to say that this is necessarily the only way to determine what the content of folk psychological concepts is. Another approach, and now a common one, is to argue that the content of folk psychological concepts can be identified through experiments in which non-experts are asked about their opinions concerning the nature of folk psychological phenomena, such as beliefs, desires, and attention. For an account of this kind of approach, and an example of it in action, see Knobe et al (2012). It comes under a branch of philosophical investigation that is often referred to as 'experimental philosophy'. This approach will not be addressed substantively in the thesis. However, it does not necessarily conflict with the views provided here. In the study of folk psychology, the primary point of experimental philosophy is to identify how non-experts conceive of mental phenomena, by avoiding the approach used by many philosophers, which is to simply rely on what theorising based on their own, individual intuitions tells them about the kind of views non-experts have about the nature of mental phenomena (an approach often derisively called 'armchair philosophy'). This latter approach, it is argued, is coloured by the understanding that experts come to develop through their own theorising of mental phenomena, and results in the development of concepts that are not the same as those shared by the folk. The way in which the folk psychological concept of attention will be determined in this thesis is through an analysis of the way the term 'attention' is used in everyday language. Although this method may be coloured by the intuition of the author, such bias is counteracted by deliberately focusing on the way the term "attention" is commonly used by non-experts in everyday contexts. As such, this method could be considered compatible with, and perhaps even complementary to, the way that experimental philosophers attempt to determine the content of folk psychological concepts.

'attention', instead of listing the beliefs about attention individually, will now be supplied. Then, a description of what fixing the reference of a term involves will be laid out.

The various properties of phenomena that people pick out in ordinary discourse when they use terms will be referred to as their 'superficial properties'. These are not the kinds of properties that a scientist identifies through research into the underlying nature of such phenomena. They are the properties that seem immediately accessible through experience or common sense.[87] In other words, they are the qualitative properties of things, or the properties of things that people understand through a rudimentary causal acquaintance with them (i.e. glass is fragile because it shatters when struck). With things like water, they are physical properties, like that it is a liquid or that it is transparent. With things like mental phenomena, they are folk beliefs, like the belief that a mental phenomenon feels a certain way or that it causes certain behaviour. Now, if water were to be described in terms of just one of its superficial properties, say that it is a liquid, then this would not be an intelligible account of the kind of thing that it is. Such a description could apply to a huge number of different phenomena, like, for instance, petroleum. To give an intelligible account of water, a unified description that includes the range of superficial properties that it possesses needs to be provided. By the same token, the folk psychological concept of attention cannot be explained by listing a single folk belief about it, as this belief could apply to a range of different mental phenomena. To give an account of the folk psychology of attention a unified description that comprises the body of beliefs that the folk have about attention needs to be provided. The best way to do this is to fix the reference of the term 'attention'.

As noted at the outset of the thesis, fixing the reference of a term is a concept that is borrowed from philosophers of language such as Kripke and Putnam.[88] Under this

[87] The expression 'seem accessible' rather than simply 'accessible' is used here, as scientific investigation can, and often does, show that the actual properties of things often differ from the properties of things as they appear in our everyday acquaintance with them.
[88] See Kripke (1980), Putnam (1973, 1975), and Schwartz (1977).

understanding, the reference of a term is fixed by a description of the thing, or kind of thing, that is picked out with the term. This description is designed to help people to identify, most easily, what is intended to be picked out with that term.[89] As was just discussed, the superficial properties of things are the properties of things with which people are acquainted through everyday interaction. So, in order to fix the reference of a term, it is best to provide a description of these superficial properties. This is reasonable, given that most people share the experience and everyday understanding of the superficial properties of things, and so the description of such properties is what will best help people identify the thing referred to with a term that is used. For an example of fixing the reference of a term, consider the term 'alcohol'. Many people have an everyday interaction with alcohol. It is a clear liquid which has a characteristic odour. It causes people to become intoxicated if they imbibe a large enough quantity. It is also an ingredient found in a variety of beverages and desserts. These are the superficial properties of alcohol. The reference of the term 'alcohol' is fixed by expressing these superficial properties so that others understand what is being referred to when the term 'alcohol' is used. In other words, If somebody were to fix it, they would say that 'the thing we call 'alcohol' is that thing that smells this way, is in these kinds of drinks, and gets us drunk if we have too much of it', so that the person they are talking to understands what is being referred to when they use the term 'alcohol'.

In what follows the reference of the term 'attention' will be fixed, after the various superficial properties or folk beliefs that people attribute to it have been determined. Using this method, a unified account of the folk beliefs that people have about attention will be provided. Therefore, so too will a clear explanation of the folk psychological concept of attention. However, an analysis of terms like 'attending', 'attentive', 'attentively', and 'attentiveness' will first be given. This analysis will show that, while these terms have similar

[89] Ibid.

referents to the term ‘attention’, their referents are not the same, and they therefore cannot form a part of the explanation of the folk psychological concept of attention, as they did in the classic ordinary language work of Alan White.[90]

6. The folk psychology of attention

6.1. Attending

To begin, the concept of attending will be identified. Alan White argues that attending is a polymorphous activity concept.[91] In other words, he believes that attending does not refer to any particular activity but is rather something that various kinds of activity may be an instantiation of, depending on the way they are conducted. The word ‘attend’, in any of the variations of the word that one might want to use, is a verb. This allows White’s claim to be assessed, given that there has been extensive literature on how to classify verbs.[92] The most commonly used classification of verbs is Zeno Vendler’s four-way classification, developed in his paper ‘Verbs and Times’. For Vendler, verbs can refer to states, accomplishments, achievements, or activities.[93] Vendler’s classification will be used in what follows, and the category that the term ‘attending’ fits in to will be identified. When this is carried out, White will be argued to be correct in his claim that attending is an activity concept. Then, the finer details about the kind of activity concept that attending is will be determined.

One cannot perform states in a certain manner.[94] For example, one cannot hate carefully or believe things to a greater or lesser degree. However, one can attend carefully. Also, states cannot be described in continuous senses.[95] For example, one cannot say that ‘I am believing that the earth is a sphere’ or ‘I am knowing the time’. Yet, it makes perfect sense

[90] White (1964).
[91] See White (1964, pp. 5-11) and (1967, pp. 63-66).
[92] See Vendler (1957), Kenny (1963), Mourelatos (1978), and Rothstein (2004).
[93] See Vendler (1957).
[94] Vendler (1957, p. 149).
[95] Ibid, p. 148.

to say that 'I am attending to my book'. As such, the first thing that can be identified is that 'attending' does not refer to a state.

If something is an accomplishment it will implicitly terminate at a specific point.[96] For example, achievements are things like running a marathon and reading a book, as one ends at the finish line of the marathon and the other ends at the last page of the book. However, people can attend to something for an unspecified amount of time (one could attend to a book for a minute or an hour). As such, the second thing that can be identified is that 'attending' does not refer to an accomplishment.

If something is an achievement it will begin and end almost instantaneously.[97] For example, an individual could notice the time, or find their watch, and these events will finish almost as soon as they occur. However, although attending to something can lead to an achievement (particularly noticing something), it is not necessarily over almost as soon as it has begun. For example, it is possible to attend to a book for a very long time. As such, the third thing that can be identified is that 'attending' does not refer to an achievement.

There is now only one option left – activities. Activities are processes with no natural endpoint.[98] The term 'attending' fits in this category. Ultimately, if somebody says that they are 'attending' to a certain matter, it is an ongoing process that does not have any specified natural endpoint. It is something that they are engaged in that could last a minute or an hour. Attending is an activity concept.

Attending is an activity concept, but it does not apply to all activities. As will now be explained, it is an activity concept that is only associated with mental acts. For instance, moving one's hand could never be described as a form of 'attending', although watching one's hand move, and imagining one's hand move, could be. To use a more complex example, when one is attending to a book it is not the turning of the page that one describes as

[96] Rothstein (2004, p. 6).
[97] Ibid.
[98] Ibid.

‘attending’, nor is it holding the book, but rather it is following the words with one’s eyes and thinking about those words that is the thing that is characterised as ‘attending’. Under any circumstance in which something is characterised as a form of ‘attending’, it will never apply to a physical act but only to a mental act, which involves focusing on something in some way.

Although many mental acts can be referred to as forms of ‘attending’, ‘attending’ does not refer to a specific kind of mental activity. This can be shown through a common example of driving. When people drive cars, they generally attend to the road by looking at the things around them (vehicles, traffic lights, pedestrians, etc.) so that they may navigate their car through the environment. Yet, sometimes people do not attend to the road or pay the road any attention. They are ‘zoned out’ and perform this activity in what David Armstrong describes as a ‘state of automatism’.[99] However, such people still look at things and then navigate the car through the environment accordingly, even though they are not said to be ‘attending’ to those things. As a result of this, it can be argued that the perceptual activity involved in driving is still an activity of the same fundamental kind when it is both a form of attending and not a form of attending, given that in both cases the activity has all of the same functional characteristics. The term ‘attending’ then, does not refer to any specific kind of mental act given that the same fundamental kind of perceptual mental act can be both a form of attending and not a form of attending.

As will now be demonstrated, the term ‘attending’ refers to a specific way in which mental acts are carried out. The word ‘attending’, when it is used with regard to attention (it has other uses that pertain to the word ‘attendance’ and not attention), refers to using one’s attention in a mental act. This is why mental acts can be of the same fundamental kind whether they are considered a form of attending or not. Such mental acts are only forms of attending in so far as attention is used in them. In essence then, the word ‘attending’ describes

[99] Armstrong (1968, p. 93).

a mental act that is carried out in a particular way, that is, with attention, and does not refer to any specific mental act. Attending is thus a polymorphous activity concept, and it is something that White is correct about. However, this does not mean that attention is necessarily a polymorphous activity concept, as White assumes it is, because 'attending' does not refer to attention itself but only the fact that it is being used. Indeed, as will be identified after the following section, 'attention' does not refer to an activity.

6.2. Attentive

The things the terms 'attentive', 'attentively', and 'attentiveness' refer to will now be assessed. The first is an adjective, the second an adverb, and the third a noun. All will be found to refer to different phenomena than the term 'attention' does. The adverb will be analysed first. Myriad things can be described as being done 'attentively'. When somebody is described as performing something 'attentively' the fact that they are attending to something, and the way that they are attending to that thing are expressed (i.e. 'I listened attentively'). In essence, the term 'attentively' refers to the use of attention in a particular activity. It is a term that provides no more information about what attention is than 'attending' does. The adjective, 'attentive' will now be discussed.

Generally, to say that someone 'is attentive', in whatever manner, is to refer to someone with a standing disposition to give their attention to something (that is usually specified) and does not necessarily refer to the fact that they are paying any attention to anything at a given time. For example, one could say that 'x is attentive to detail in her studies' while x is soundly asleep and is not paying attention to anything. Or, to use another example, if one says that 'y is not attentive in the class room', it would mean that y is not disposed to pay attention to what is going on when in class. The manifestation of this disposition is described when someone is described as 'being attentive' at a given time. For example, if y is

described as ‘being attentive to what is said in class’, y is being described as someone whose disposition to pay attention to what is said in class is active at a given time (that is, she is paying attention at that time). This disposition could be considered in terms of a dispositional mental state that motivates people to give their attention to something under particular circumstances. Whatever it may be, it is not the focus of this chapter. The focus of this chapter is to describe the beliefs the folk have about attention itself. The way the term ‘attentive’ is used does not provide any account of the beliefs the folk have concerning attention itself but rather about their beliefs concerning the dispositions that people have to apply it. With this in hand, the term ‘attentiveness’ will now be discussed.

‘Attentiveness’, a noun, is a word that is rarely used. Although the suffix of the word suggests that it describes an ‘attentive state of being’, this is not really the case when its common usage is considered. It is a word used to describe people who have shown a propensity to pay careful and thorough attention to what they are doing when they engage in various tasks. For example, one could say that ‘her attentiveness is second to none’ or that ‘his attentiveness to detail in his embroidery can be seen in these intricate patterns here’. It is a term with positive connotations, and is the kind of term one could list in a series of virtues about themselves, or others (i.e. ‘I have shown courage, loyalty, intelligence, and attentiveness’). This term, just like the others, does not provide an account of what attention is. Ultimately, it is a term used to describe a person with the ability to pay close and skilful attention to what they are doing.

An analysis of what people actually refer to when they use the various words related to attention in everyday discourse is an interesting endeavour. This analysis has barely touched the surface. What is clear, though, is that none of these terms have the same reference as the term ‘attention’. The reference of these terms would be given as descriptions of mental

phenomena that intrinsically involve attention in one way or another but not as descriptions of attention itself. The challenge now is to describe the beliefs that the folk have about attention.

6.3. The superficial properties of attention

When people talk about attention they often talk about intentionally giving it to things, by 'paying it' to them, 'turning it' on them, or 'shifting it' to them. Also, they talk about it as something that is unintentionally given to things when it is 'caught', 'attracted', or 'called' by them. Whenever the use of attention is described in these two ways, it is described as something that occurs as part of the mental acts of an agent.[100] For example, the terminology 'something just caught my attention', can only apply when one is talking about performing a mental act (i.e. looking at something, thinking about something, etc.). As such, the first thing that can be identified about the way people understand attention is that (i) people talk of attention as something which is only used either unintentionally or intentionally in the mental acts of an agent.

Attention is something that is described as coming in degrees. For example, if a woman is driving very carefully, it could be said of her that 'she is giving all her attention to the road'. To use other examples, one could say to someone that they should 'pay more attention to what is being said' or say of someone that they are 'paying that task very little attention'. These kinds of common expressions convey an interesting fact: in everyday discourse attention is described a kind of resource that people have, one that they can use more or less of. Other common expressions indicate that people think of attention as a divisible resource. For example, if a man were to describe what he is doing when he both listens to his housemate talk about his day and makes his dinner at the same time, he could justifiably say the following: ' I am dividing my attention between cooking dinner and

[100] The folk interpretation of mental actions by Alfred Mele (1997) given at the outset of his paper 'Agency and Mental Actions' is used here, in which mental actions are those actions that do not essentially involve agents moving their bodies.

listening to my housemate'. Another example of people describing attention as being divisible occurs when people say the phrase 'you have my undivided attention'. Attention is also described as a limited resource. For example, people often say things like 'you have my complete attention', 'you have my full attention', or 'I am putting all of my attention into the task at hand'. These common sayings would make no sense unless people thought there were some limits to the amount of attention they can give things at a particular time. With all of the points concerning attention as a resource in hand, it can be concluded that (ii) people talk of attention as a kind of limited, divisible resource.[101]

The idea that people consider attention to be a limited divisible resource is given further support when the use of the common phrase 'attention span' is considered. People use this phrase to describe their ability only to be able to give a task the amount of attention it requires for so long, before they are distracted by something that will draw some of their attention away from it. For example, if someone says that 'my attention span is too short to deal with marking all of these papers', it means that they cannot give the papers the amount of attention they require for them to all be marked properly before too much of their attention is taken away from them by a distracting element, like an intrusive thought. In this example all three elements of attention as a limited divisible resource are expressed. First, there is an amount of attention required to do a task, which implies that it is a resource. Second, there is a division of attention when they are distracted and give some of their attention to something else. Third, there is the fact that their attention is not limitless at a given time, insofar as they cannot simply continue the task they are doing with the same amount of attention and apportion more attention to something else from an infinite supply of attention that they have.

None of the things described thus far explains the role that attention plays in our conscious experience. Nevertheless, one of the superficial qualities of attention is the role that

[101] Allport (2011, p. 25) also claims that a part of the folk concept of attention is that it is a limited, divisible resource.

it plays in such experience. William James identifies this quality in his work. In his famous description of attention, which begins with the statement that 'everyone knows what attention is', James goes on to describe the role he thinks attention plays in conscious experience. He claims that 'focalisation, concentration, of consciousness are its essence'.[102] There is a debate over whether non-experts hold that every time attention is used, it is necessarily used consciously.[103] This is not of concern here. The question is: do we feel as if our consciousness is focused or concentrated on something when we are conscious and are giving something our attention? The answer is an unequivocal 'yes'. It is reflected in experience, and also in the way people talk about attention. For example, whenever somebody demands that someone else 'pay attention' to them, they are demanding that the other person make what they are saying or doing a focal point, or the focal point, of their current conscious experience. As such, James' point not only accords with our everyday experience but also the way people use the term 'attention'. So, it can be concluded that (iii) people talk of attention as something that focuses or concentrates their consciousness on things.

Some components of the folk psychological conception of attention have been identified. However, an important question remains: what role does attention play in everyday psychological explanations? Some things have been identified about the way people use the term 'attention' in everyday discourse but not what it actually explains in terms of our behaviour.[104] Although Lewis' approach is not being used, by holding that the causal role people attribute to mental phenomena in everyday psychological explanations are the sole determinants of the reference of mental terms, the causal roles that mental phenomena play in everyday psychological explanations play at least some role in determining the references of mental terms. People do attribute particular causal properties to mental phenomena to explain

[102] James (1890, pp. 403-404).
[103] See Mole (2008a, 2008b), Kentridge (2011), Kentridge et al. (1999, 2008), Kentridge and Heywood (2001), and Koch and Tsuchiya (2007, 2008).
[104] See Lewis (1966, 1970, and 1972).

certain behaviour, and such properties are some of their superficial properties. As such, a scenario will now be described, and the nature of what attention explains in it will be determined.

A student is told by his teacher that he did not understand her explanation of calculus because he was not paying attention. The teacher points to another student called Gilbert and says, 'if you had given your attention to me like Gilbert here, you would know what I am talking about'. In this case, the teacher talks of attention as the thing that explains whether or not the students take in information about what they are being told, and have the capacity to retain that information. These are the main, if not the only, roles that attention plays in everyday psychological explanations. Attention is described as the thing that explains whether we are accessing information about something at a particular time, and also whether we have the capacity to retain information about that thing. This can be seen in a variety of common expressions. For example, if you are told to 'pay attention to what is being said, because it won't be said again', you are told to take in what is being said, and to remember what is being said. Or to use another example, if an unlicensed driver is asked why she failed her driving test, and she says 'I didn't pay attention to what my instructor showed me', she is pointing out that she failed her test because she did not gain access to, and so did not have the capacity to retain, the information provided by her instructor that she required to pass her driving test.

Before a conclusion on this point is reached, it is good to note that the ways in which people can access information are broad. As a result, there are a variety of different ways that people are understood to access information, when they are described as giving their 'attention' to things. To see this, consider two people, one who can read, and one who cannot. The person who can read, when they are described as giving their 'attention' to a book, are described as gaining a particular kind of access to the text. They are described as accessing it in such a way that the content of the book is intelligible to them, and, if the book does not

involve concepts that are beyond their understanding, accessing it in a way that will allow them to understand the content of the book. However, the person who cannot read, when they are described as giving their 'attention' to a book, will at best be described as gaining access to perceptual representations of the book, and not any information about the content of the book. Ultimately, the way that people are taken to access information when they are described as paying 'attention', seems largely to depend on the context in which the term 'attention' is drawn upon to explain behaviour.[105]

Despite the above, the concept of accessing information, understood generally, covers most, if not all, of the platitudes where attention is given a causal role in everyday psychological explanations.[106] Attention is described as a thing which allows people to access information about things, and, owing from this, it is also described as the thing which gives them the capacity to retain information. As such, it can be concluded that (iv) people talk of attention as something which allows us to access information, and have the capacity to retain that information.

6.4. Fixing the reference

In the previous discussion, it was concluded that people talk about attention in everyday discourse in the following four ways:

(i) Something which is only used either unintentionally or intentionally in the mental acts of an agent.

(ii) A kind of limited divisible resource.

[105] A point, which will become clear when the reference of the term 'attention' is fixed, and a cohesive account of the folk's beliefs about attention is provided, is that the kind of access people are taken to achieve through giving their 'attention' to things results from the type of mental act in which attention is understood to be used. For example, people are taken to get access to auditory information through using their 'attention' in listening to something, and are taken to get access to visual information through using their 'attention' in looking at something, and so on.

[106] There are other platitudes which seem to play a different causal role on a preliminary analysis, such as 'pay more attention to me', but as we will see in the coming section, attention plays the same role in these scenarios too.

(iii) Something that focuses or concentrates our consciousness on things.

(iv) Something that allows us to access information, and have the capacity to retain that information.

The various ways in which mental terms are used in everyday discourse express the everyday understanding that people have of the superficial properties of their referents. As was discussed earlier, fixing the reference of any term is done through a description of the everyday understanding of the superficial properties of its referent, so that people know what is being referred to with that term. So, to fix the reference of the term 'attention' a description of attention that includes these four points will be developed, as they are the most prominent superficial properties people attribute to attention when the term 'attention' is used in everyday discourse. By providing a description of these things, it will be made most clear what non-experts try to pick out when they use the term 'attention', and so the clearest account of the folk psychological concept of attention will also be provided. This is done below in three parts, progressively incorporating all of the information that has been identified here. First, a description of what attention is will be provided. This will develop an account of attention that is consistent with points (i) and (ii). Second, a description of what attention does will be built into this. This will develop the account further, by incorporating point (iii) into the picture that of attention that is provided. Third, an explanation of why attention does what it does will be provided. This final point will incorporate point (iv) into the description of attention. The description of attention is as follows:

First, as we see in point (i), attention is something that we use in our mental acts. Point (ii) shows that it is a resource. As such, we can say that attention is a resource that we use in our mental acts. These acts include simple things like thinking, looking, listening, and imagining. They can also include more complex acts, like watching television, reading books, tracking

objects, scanning a crowd for a friend, or thinking about complex mathematical formulae. In some cases we use it involuntarily, as when we look at a sudden flash of light that 'grabs' our attention, but generally we use it voluntarily, like in the more complex cases just listed. We can divide this resource between different mental acts simultaneously, as when we are watching the road while driving and are simultaneously listening to a friend. There are also limits to the amount of it we can use at any given time, as when there are too many things at once to perform and we can only give our attention to a limited number of them.

Armed with the knowledge that attention is a resource used in our mental acts, we will now see what it does in them. The answer to this is provided by point (iii), which shows us that attention focuses our consciousness on things. Combined with our existing points, this allows us to say that attention affects our mental acts by focusing our consciousness on the object, or the content, of our acts. For example, when we use our attention in looking at an object, that object becomes a focal feature of our visual experience, looking more determinate than the surrounding environment. Or, if we use the resource in imagining something, say an image, that image becomes one of the central features of our conscious experience at that time. The amount of the resource that we use in our mental acts determines how focused our consciousness is on the object, or content, of these acts. For example, when we are 'deep in thought' much of our attention is given to the activity of thinking. In such a case, our train of thought is such a focal feature of our consciousness that we are often not aware of other things that are happening around us. Conversely, when we 'pay very little attention' to what someone is saying, what they are saying seems to be more of a peripheral feature of our conscious experience than a focal feature of it, and we often miss much of what they say.

Finally, we need to understand why attention is a resource used in our mental acts to focus our consciousness on their objects or contents. We can gain this insight from point (iv), which shows that attention allows us to access information about things, and it gives us the capacity to retain information about those things. From this we can claim that the function of attention, a resource, is to focus our consciousness on the objects or contents of our mental acts so that we can access information about them, and can then have the capacity to retain

> that information. We can claim that attention allows us to access information about the objects and contents of our mental acts through the fact that it causes us to consciously acquire information concerning them when it is used. For example, if we use our attention in the activity of looking at an object, we will become conscious of the surfaces, colour, and spatial positioning of that object. Or, if we use the resource in the activity of thinking, the content of our thoughts will become directly present to our consciousness. We can claim that attention gives us the capacity to retain information about the objects or contents of our mental acts because we are only capable of actively remembering things about them if it has been used in them. For example, we can only remember, and thus know, when to next catch the bus if we gave our attention to looking the bus timetable, listening to an individual who told us the bus times, or to some other means of acquiring information concerning the bus, at some point.

The reference of the term 'attention' has now been fixed through a description of its most prominent superficial properties. Given that the superficial properties attributed to the referents of mental terms are determined by folk beliefs about them, with this description a unified account of the folk psychological concept of attention has been developed, comprising the everyday beliefs the folk have about what it is, what it does, and why it does this. First, the folk believe that it is a limited, divisible resource that is used both voluntarily and involuntarily in our mental acts. Second, the folk believe that it focuses our consciousness on the objects, or the contents, of such acts. Finally, the folk believe that it does this so we may access, and have the capacity to retain, information about these contents or objects.

The answer to the question 'what is attention?' that is in line with common-sense, is constituted by the description of the folk psychological concept supplied here. It is an account of what everybody knows attention to be, an account of the thing people describe as 'paying', or 'shifting' to things in their everyday lives. Given this, the aim of this chapter has been fulfilled, and the first answer to the question has been provided. With that in hand, the value

this answer has to different areas of enquiry, and the value that it has to the two other answers to the question 'what is attention?' will now be discussed.

7. The Relevance of the folk psychological concept to other fields of enquiry

Attention is one of the most widely used folk psychological notions. Every day, people use the concept of attention to communicate with each other. However, just as in the case of many rules of grammar, the folk concept of attention is something that is implicit[107] which people intuitively draw upon when required. What has been discovered here, by making the beliefs of the folk concerning attention explicit, is that the folk psychological concept of attention is not simple at all. It is a sophisticated concept that people draw upon to describe why others have behaved in some way, to describe why they may behave in some way, to explain their own behaviour to others, to describe their phenomenal experience, and to try to understand the phenomenal experience of others, among other things. This concept also has uses beyond its everyday application, which will now be discussed.

Earlier in this chapter, the relevance of folk concepts to those in philosophy and the mental sciences was identified. Having now developed an account of the folk concept of attention, the things philosophers and scientists should do with it can now be made clear. Broadly speaking, if they want the public to understand their work, those in the mental sciences should explain how different aspects of our underlying neural architecture actually

[107] The word 'implicit', as it is used here, should not be interpreted in the way it is in the mental sciences. In the mental sciences, if something is 'implicit', say a concept, it often means that that thing is deployed at the sub-personal level, and people are not, and cannot be, aware of deploying it. For example, it is used in this way in Amodio and Devine (2006), Banjali and Greenwald (1994), Dovidio et al. (2009), Nosek et al. (2007), Petty et al. (2009) concerning the cognitive biases people have. If something we use is 'implicit' in the sense given here, it does not denote a lack of awareness of the thing that we are using, only a lack of immediate awareness of the nature of that thing. For example, we know that we are drawing upon the concept of attention whenever we use it, we are just unaware of the entire content of the concept we are using when we use it. The same applies with our grammatical concepts.

fulfil the role of the thing non-experts call 'attention' in varying circumstances.[108] Broadly speaking, philosophers should develop a more sophisticated interpretation of the mental concept of attention, and they should also seek to explain why the basic intuitions people have about attention are the way they are. In effect, in these areas of enquiry, the folk concept is an explanandum. There are also specific ways that the folk psychological analysis of attention will be of use in each of the two chapters that follow. They will now be explained, starting with the coming chapter on the metaphysics of attention.

In the next chapter, Christopher Mole's theory of attention as cognitive unison is shown to be the best available theory of the metaphysics of attention. This account of attention will answer the question 'what is attention?' by describing what attention should best be considered to be, in light of the latest empirical data concerning our brains. It is an account of attention that will also benefit from its ability to explain why the folk have the understanding of attention that they do. The reason for this is that any account of the metaphysics of attention that can explain why the folk psychological understanding of attention is the way it is, and why attention is actually better understood as far more complex phenomenon, has advantages over its competitors. A theory that does so guarantees that the phenomenon it identifies is conceptually related to what most people understand attention to be – an important thing to do for a theory that seeks to explain how attention really plays the role that people attribute to it in their everyday lives. Given this, the ability that the cognitive unison theory will be shown to have in its capacity to explain the folk concept will give it an advantage over competing theories, as this will increase its claims to conceptual accuracy. In this, the folk concept will play an important role in the next chapter, by supporting the empirical answer to the question 'what is attention?'.

[108] This kind of research can identify whether or not attention is a natural kind. For example, if enough data on the underpinnings of what people call 'attention' in different contexts is provided, and if a particular brain mechanism or group of mechanisms is found to be essential to the underpinnings of attention across these contexts, attention can be considered a natural kind under an essentialist framework.

In the fourth chapter, the question ‘what is attention?’ will be answered using a description of what attention is in our experience of it. In other words, an account of the phenomenology of attention will be provided. At the outset of the chapter, it will be demonstrated that folk psychology, in particular the folk concept of attending, provides the framework through which the phenomenology of attention can be identified. This will be found to be the case due to an experiential feature of the mental acts that people refer to as forms of ‘attending’. This feature is what makes people come to think of as mental acts as ‘attending’, given that it is the feature that makes people think that attention is used in such acts. It is a feature that is loosely described through the folk concept of attention in terms of ‘focus’ and ‘concentration’. It will be shown that if this feature is identified and elaborated upon an account of what is essential to our experience of attention will be provided. In this way, the folk psychological understanding of attention, specifically the understanding of the kind of acts in which it is used, provides the target for the substantive analysis of the phenomenology of attention to identify in the fourth chapter.

8. Conclusion

In this chapter the common-sense answer to the question ‘what is attention?’ has been provided, through the account of the folk psychology of attention developed in it. In order to do this, two points were first determined. They were (i) the means by which the content of folk psychological concepts may be identified and (ii) the relationships that folk concepts have to different fields of enquiry. To provide an accurate account of these two points, the theories that best capture the nature of folk psychology were identified, and their accounts of (i) and (ii) were explained. They were Lewis’ theory-theory interpretation of folk psychology and the Narrative Practice Hypothesis developed by Hutto. Their shared accounts of (i) and (ii) were (i) that the content of folk concepts can be identified through an analysis of the way

mental terms are used in everyday language and (ii) that folk concepts are explananda for those in other fields of enquiry. A method to identify the folk concept of attention was then developed. This method first involved identifying the superficial properties of attention by an analysis of the way the term 'attention' is used in everyday discourse. Then it involved fixing the reference of the term through a description of these properties.

When the method was applied, the folk psychological concept of attention was identified. This folk concept, put as succinctly as possible, is as follows:

> Attention is a limited divisible resource that is used both voluntarily and involuntarily in our mental acts. When it is used in them, it focuses our consciousness on their objects, or their contents, so that we may access and have the capacity to retain information about such objects or contents.

Having identified this concept, the ways in which it can be used in other areas of enquiry were discussed. In general, it was held to be an explanandum where more sophisticated areas of philosophical and psychological enquiry are concerned, such as the account of the metaphysics of attention that will be supported in the next chapter.

Apart from any use that it has pertaining to other areas of enquiry, the development of the folk concept of attention in this chapter was an intrinsically important enterprise. This account makes explicit the intuitive understanding of the role people attribute to attention in their everyday lives, and the role they attribute to it in the lives others. This is important, simply because it provides a better picture of how people understand the nature of one of the key mental players in their everyday lives, and therefore a better picture of how they understand themselves. However, it must be stressed that this concept is no more than a communicative tool that is representative of the most basic intuitions people have concerning their own minds and those of others. At its core, it is still a folk concept that is part of either a

theory or a narrative practice that does not identify the way our brain or our mind works at any fundamental level, but rather assists in communication. Ultimately, its complexity and value in different areas of application shows that common-sense is no simple thing, and this explains why the common-sense answer to the question 'what is attention?' took so much analysis to identify. It is a testament to what Bishop Berkeley famously called the 'bent and genius of our tongue'.[109]

[109] See Berkeley (1998, p. 34).

Chapter 3 –The Metaphysics of Attention

1. Introduction

In this chapter, the second answer given in this thesis to the question 'what is attention?' will be provided. This answer explains what kind of brain mechanisms and processes, if any, constitute attention in light of the latest empirical evidence. As was argued in chapter one, a good account of the metaphysics of attention can provide this kind of answer. A good account of the metaphysics of any phenomenon is one that provides the most accurate account of that phenomenon possible. It does this by providing an account of the phenomenon that is accurate in terms of the way the world is, by drawing upon the latest empirical evidence, and through being conceptually accurate, by being capable of explaining how the phenomenon comes to manifest properties that non-experts are familiar with. To provide this kind of account concerning attention, such an account needs to be consistent with data collated by those in empirical psychology and neuroscience, and needs to be capable of explaining why people have the intuitions about attention and experience of attention that they do. Fortunately, in the analysis of theories of the metaphysics of attention that will be the focus of this chapter, it will be shown that this research has already been undertaken, and that such an account has been created. That is, the empirical answer to the question 'what is attention?' is already available.

The first half of this chapter will be dedicated to rejecting inadequate interpretations of the metaphysics of attention. This will have several stages. First, a famous passage by William James concerning the nature of attention will be discussed.[110] The conclusion that it does not provide an adequate account of the metaphysics of attention will be reached, a conclusion James himself will be shown to have endorsed. Second, process theories of

[110] See James (1890, pp. 403-404).

attention will be assessed. Such theories hold that attention should be identified with the sub-personal processes that constitute it. These theories have dominated empirical psychology for the past hundred years.[111] This section will begin with the rejection of James' dual process interpretation of the metaphysics of attention (an interpretation that differs from the one in his classic passage)[112] and will conclude by endorsing Mole's argument against process theories generally that, if correct, makes them inadequate accounts of the metaphysics of attention.[113] Third, an analysis of three classical adverbial theories of the metaphysics of attention – that is theories that understand attention in terms of ways in which things are done and not in terms of a particular thing – will be provided.[114] They will all be rejected for conceptual reasons. Finally, recent accounts of the metaphysics of attention in philosophy will be discussed.[115] They will all be argued not to be appropriate because they do not delve substantially deeper than the personal level.

The second half of this chapter will establish Mole's cognitive unison theory as not only the best available theory of the metaphysics attention but also as a good theory of it. This will give it the status of being the theory that provides the empirical answer to the question 'what is attention?' This half of the chapter will be divided into two parts. First, an exposition and defence of the cognitive unison theory will be supplied. In this section, Mole's theory will be shown to be an adverbial theory of attention that conceives of attention in terms of the way particular sub-personal processes are utilised in the service of the tasks of an agent.[116] It will be argued to be superior to its major opponents in process theories of attention in several ways, and to have the capacity to respond to a critique by a proponent of such theories,

[111] For prominent examples of such theories, see Broadbent (1958, 1971) and Kahneman (1973), and Treisman and Gelade (1980).
[112] See James (1890, p. 434).
[113] See Mole (2011 pp. 36-38).
[114] See Bradley (1886), Ryle (1949, p. 141), and White (1964).
[115] See Smithies (2011), Watzl (2011), and Wu (2011a, 2011b, and 2011c).
[116] See Mole (2011).

Christopher Peacocke.[117] Second, Mole's theory will perform something that will be established as an important task for a theory of the metaphysics of attention. It will explain why all of the major aspects of the folk psychological concept of attention expounded in the last chapter are the way they are.

In this chapter, it will be demonstrated that Mole gives the most sophisticated account of attention available. His will be identified as an account of the metaphysics of attention that explains why the most basic intuitions people have about attention are the way they are, goes beyond them, and provides a picture of attention that can bring together our experience of attention with the most recent data from empirical psychology and cognitive science. In doing so, it will provide the second of the three answers to the question 'what is attention?' in this thesis, by providing the most accurate account of what attention really is, behind the scenes, and how it gives rise to attention as people are acquainted with it in everyday life.

2. The starting point

At the turn of the twentieth century, the psychologist William James made a remark on the nature of attention that would have far-reaching appeal. He wrote that:

> Everyone knows what attention is. It is the taking possession by the mind, in clear and vivid form, of one out of what seem several simultaneously possible objects or trains of thought. Focalisation, concentration, of consciousness are its essence. It implies withdrawal from some things in order to deal effectively with others, and is a condition which has a real opposite in the confused, dazed, scatterbrained state which in French is called distraction, and Zerstreutheit in German.[118]

[117] See Peacocke (1998, pp. 66-67).
[118] James (1890, pp. 403-404).

This is a classic passage. James eloquently moves from a description of the metaphysics of attention into a description of its qualitative character, and in so doing he seems to answer every question one might ask about attention. The point he makes about the metaphysics of attention is that attention is something that involves us locking onto thought contents or objects. The phenomenological point he makes is that, when we attend to things, it feels as if our consciousness becomes focalised, or concentrated on them, and feels as if we withdraw from other things as a result. From this something basic about the nature of our experiences of attending to something or other may be inferred. Such experiences will involve a salient object, or an occurrent content, at the expense of other contents or objects.

Although it possesses the insights described above, James' passage only explains some points about the folk psychology of attention. It is insufficient to give the kind of basic, foundational account that is required for it to be a good account of the metaphysics of attention, despite some claims to the contrary.[119] It gives no clear answer to what attention is, beyond the more basic intuitions people have about it, and is just a broad brush description with a superficial account of its phenomenology and metaphysics. Indeed, all the insights James could provide about what non-experts think attention is were incorporated into the folk psychological concept of attention provided in the last chapter. To give a good account of the metaphysics of attention – to give the most accurate, explanatorily powerful answer to the question 'what is attention?'– an account that goes further than folk psychology is required.

James would likely agree with this. He provides a different account of the 'intimate nature' of attention in The Principles of Psychology, despite telling us what 'everybody knows what attention is' is in this passage.[120] For James, an account of what attention really is, an account of its metaphysics, will differ from the folk psychological understanding. He is correct. Things that seem pre-reflectively obvious can prove to be radically wrong in reality.

[119] See Johnson and Proctor (2004, p. 94), Mack and Rock (1998, p. 25), Navon and Gopher (1979, p. 235), and Posner (1994, p. 7398).
[120] James (1890, pp. 434).

James' attempt at an account of the metaphysics of attention, and its corresponding influence over the way attention has been understood in empirical psychology, will now be explained.

3. Process theories of attention

3.1. James' theory

In his Principles of Psychology, James extensively discusses the 'intimate nature' of attention, which effectively amounts to a detailed account of the metaphysics of attention. The core of the theory is contained in the following passage, in which he claims that attention is constituted by two processes, which are:

> 1. The accommodation or adjustment of the sensory organs; and
> 2. Anticipatory preparation from within of the ideational centres concerned with the object to which the attention is paid. [121]

The first process is sensory. It involves looking at things, listening to things, smelling things, and so on, by turning one's eyes onto them, pricking one's ears towards them, and sniffing them. The second process is purely cognitive. It involves imagining objects, or thinking things, or remembering things, and so on by gearing the 'ideational centres' (whatever they are) of one's brain to them. This account of attention is succinct and explains the nature of attention in terms of two kinds of sub-personal process. There are two reasons why it is explanatorily inadequate.

First, James' process account of attention conflates different forms of sensory attention, like visual attention and auditory attention, into one kind of process. Different

[121] Ibid. Italics are James'.

forms of sensory attention have significant differences from one another.[122] There needs to be a clear explanation of how they are fundamentally the same kind of process, apart from them both being involved in our perception of the world, and James does not provide it. Second, James process account leaves out peripheral attention in visual perception.[123] To understand how he does so, imagine that there is a woman bouncing a basketball at the periphery of your vision. You may attend to the basketball without moving your eyes by 'accommodating or adjusting' your sensory organs to look at it. Yet, seemingly, it does involve your visual attention. James account cannot accommodate this form of attention – it would require that you move your eyes. As a result of problems like this, James cannot give a solid process-based understanding of the metaphysics of attention. This is not to discount it entirely, given that people do seem to attend to things by looking at them, or by thinking about them and so on, but to indicate that the account needs some fundamental development.

James' basic understanding of attention is the same as that of most empirical psychologists over the last century. He is the forbearer of process theories of attention, in which attention is understood to be a certain kind of brain process. To create such theories, empirical psychologists have tried to explain attention by identifying it with one particular sub-personal process or several sub-personal processes. Some of the main attempts to do so have focussed exclusively on certain kinds of attentional processes in our brains, like visual or auditory processes, and do not attempt to find a universal attentional process within our brains.[124] These attempts will be referred to as 'modular process theories'. Others have supported the notion of a single sub-personal process that constitutes all forms of attention.[125] These will be described as 'higher order process theories'. These two types of theory have dominated empirical psychology over the last one hundred years.

[122] See Campbell (1997, pp. 65-69) and Bregman (1993).
[123] This is also often referred to as 'covert attention'. For example, see Wu (2011).
[124] See Treisman and Gelade (1980), Rizzolatti et al. (1987), and Moore et al. (2003).
[125] See Broadbent (1958, 1971), Kahneman (1973), and Dehaene and Naccache (2001).

The theory discussed below is a modular process theory of attention that is exclusively focussed on attention in visual perception. This theory of attention is interesting because of a critique of it by Mole, one which, as will be explained, creates problems for all process theories of attention.

3.2. The FIT theory of attention

Anne Treisman is a psychologist who has developed a famous modular process theory of attention known as the Feature Integration Theory of attention, or the FIT theory for short. Treisman developed this theory because of a problem she discovered in visual perception that she calls the 'binding problem'.[126] Treisman uses convincing evidence to argue that the brain does not have any single component that picks up things like colour, shape and movement together.[127] However, when we look at things, there seem to be different objects, at different locations, which have as properties colours, shapes, and movement. There needs to be an explanation for how different features such as colour, shape, and movement are bound together as the properties of objects. There is a binding problem.

Treisman can solve this problem if her theory is correct.[128] She claims that whenever we attend to something visually the binding process is activated.[129] According to her, this brain process integrates the various features picked up by our visual faculties into an object that we can see. For example, suppose that you are on a beach, and there is a shark gliding through the water in the ocean near to you, clearly visible from the shore. Treisman holds that, when you look out to where it is located, your brain, via the binding process, binds grey colour surrounded by blue and triangular shape and movement, into a fin gliding through the water. It could be argued that this binding is what enables people to have conscious

[126] Treisman (1996).
[127] See Treisman and Gelade (1980).
[128] See Treisman and Gelade (1980), and Treisman (1993, 1999, 2003).
[129] See Kentridge, et al. (1999, pp. 1805-1811), and Briand and Klein (1987, pp. 228-241) for a discussion of this process.

experience of objects in the world. This is the case, as without the binding of features performed by this process people would not experience the world in the way they do – as something composed of distinct objects that have sets of features. Rather, their experience would be one in which the various features, as yet unconnected and at certain locations, were presented to their minds.

Treisman made a fundamental advance in empirical psychology by introducing the binding problem and by introducing a theory that solves it. The binding process is very likely to be something that exists. This is generally accepted, with a few notable exceptions.[130] However, one of Treisman's claims should not be accepted. Treisman claims that the binding process is a process that can be characterised as a form of attention.[131] Various studies have now been conducted that show that the binding process occurs in cases in which certain subjects cannot pay attention to anything visually.[132] Therefore, given present data, it is justified to argue that the binding process should not be considered a form of attention, given that it often occurs when attention is not paid. In what follows, it will be shown that Mole uses this point to argue that there is good reason to doubt the accuracy of process theories of attention in general.

Mole points out that, while some studies show that the binding process occurs without a subject paying attention to anything, Treisman's studies also show that sometimes a subject's paying attention to something is fully constituted by the binding process.[133] [134] From this, Mole identifies a problem for process theories of attention. It will now be explained.

Process theories of attention identify attention with the sub-personal processes that constitute it. Given this, process theories are committed to the view that attention is to be

[130] See O'Regan and Noë (2001, p. 967) and Bennett and Hacker (2003, p. 14).
[131] See Treisman and Gelade (1980).
[132] Berti and Rizzolatti (1992) and Ro and Rafal (1996, pp. 975-976).
[133] Mole (2011 pp. 36-38).
[134] See Treisman and Gelade (1980).

identified with the sub-personal processes that constitute it in any given instance.[135] As such, under the view of attention held by process theories, any sub-personal process that constitutes attention in one instance is something that can be considered to be what attention is in that instance. This creates a problem for process theories, which Mole identifies.[136] If attention is identified with a particular sub-personal process in one instance, if it is what attention is in that instance, then any instance in which this sub-personal process occurs will need to be an instance of attention. This is what the identity claim that attention is that particular sub-personal process requires. Problematically for process theories, if empirical evidence identifies that a sub-personal process does constitute attention when it occurs in one instance, yet does not constitute attention when it occurs in another instance, then the identity claim at the heart of all process theories is shown to be false. As noted, Mole uses empirical evidence to show that attention is constituted by the feature binding process in some instances, and so the binding process needs to be considered a form of attention under the process view.[137] Also, as noted, Mole uses empirical evidence to show that the binding process occurs in the absence of attention in other instances.[138] From this Mole argues that the identity claim at the heart of process theories is false, as if it were not each time the binding process occurs it would be an instantiation of attention.[139]

Mole's argument is a powerful one. It gives good reason to hold that attention should not be conceived of in terms of any sub-personal process or any set of them. In what follows, a possible means for process theories to avoid this critique will be explained and then rejected.

[135] This applies equally to higher order process theories, and to modular process theories of attention. The difference between the two is that higher order process theories hold that each instantiation of attention is constituted by a particular process, whereas modular process theories hold that different instantiations of attention are constituted by different processes (all of which are forms of attention).
[136] Mole alters his argument concerning process theories somewhat in his book Attention is Cognitive Unison (2011 pp. 36-38). The one drawn upon here is found in his PhD thesis (2005, pp. 29-30.)
[137] Mole (2005, pp. 29-30).
[138] Ibid.
[139] Ibid.

3.3. Campbell's adoption and development of the FIT theory

The philosopher John Campbell develops Treisman's psychological theory to draw philosophical conclusions about demonstrative cognition. His chief interest is not attention itself. However, Campbell's development of Treisman's theory may allow it, and process theories of attention in general, to circumvent Mole's argument described above. His view, and how it may circumvent Mole's argument, will now be explained, beginning with an example. Then, the reason why process theories cannot avoid Mole's argument on the basis of this interpretation of attention will be supplied.

Suppose that in the earlier example involving the shark you have a friend with you. Campbell claims that, to understand what you are talking about when you say 'there is a shark in the water!' to your friend, pointing out to the ocean, your friend has to consciously attend to that thing. To do this, she must consciously attend to the objects in front of her to look for what is described in the demonstrative. She must knowingly 'experientially highlight' them to find what is being described. Campbell argues that, when she consciously attends to, or 'experientially highlights', the various objects in front of her, sub-personal processes will select information for further processing from the objects that she is looking at. If she looks at the object described in the demonstrative (the shark), her brain will further process the information it receives from it and will allow her to refer successfully to what you are talking about.[140]

Campbell argues that the further processing initiated by conscious attention to objects is an essential component of human functioning. Indeed, he argues that people would not be capable of demonstrative reference or demonstrative cognition without conscious attention.[141] Importantly, Campbell claims that the feature binding process occurs prior to consciously

[140] See Campbell (2002. pp. 31-33).
[141] Ibid, p. 28.

attending to objects. [142] The feature binding process, for Campbell, is something that constitutes 'low level' attention and not conscious attention.[143] Conscious attention, while necessarily relying on this low level attention to function, is something that Campbell claims is a different phenomenon. For him, conscious attention occurs when people actively experientially highlight objects already bound by the sub-personal binding process.[144] As will now be demonstrated, Campbell's conceptions of conscious attention and low level attention, if endorsed, allow supporters of the FIT theory to maintain that the binding process is a form of attention in every instance that it occurs, and so allow process theories of attention in general to circumvent Mole's argument.

For Mole's argument against process theories of attention to be successful, there have to be instances in which the binding process is active but does not constitute an instance of attention.[145] If however, the binding process constitutes 'low level' attention and not conscious attention, as Campbell suggests, then the instances in which Mole claims that the binding process is active but does not constitute attention are instances in which the binding process does constitute a form of attention. This is low level attention. What it would be held not to constitute, and what does not occur in these cases, is conscious attention. This is supported by the fact that these cases are described as not involving attention, because the agents in them are not conscious of the information that the binding process is integrating, which amounts to these cases being ones that do not involve conscious attention.[146] Ultimately, If Campbell's view is endorsed, in these cases, and all others, the binding process is held to constitute low level attention, a phenomenon that is necessary for conscious attention to come about. For Campbell, conscious visual attention requires the activation of

[142] Ibid, pp. 30-33.
[143] Ibid, p. 31
[144] Ibid, p. 30-33.
[145] See Mole (2005, pp. 29-30, and 2011, pp. 36-38,). It must be made clear here that this only refers to Mole's critique against process theories on the basis of the binding process. All Mole needs for his argument to be successful, is one instance in which a process that can constitute attention does not constitute attention when it is active.
[146] Berti and Rizzolatti (1992), and Ro and Rafal (1996, pp. 975-976).

other sub-personal processes involved in underpinning the 'experiential highlighting' of things.[147] With this in hand, if Campbell's view is supported, the binding process could still be considered a process that constitutes attention in each case that it is used, which will be a form of low level attention.

The reason Campbell's claims, if endorsed, rescue process theories from Mole's argument, is that Campbell's conception of attention saves process theories from a position whereby a sub-personal process, namely the binding process, constitutes a form of attention when it is active in one instance but does not constitute attention when active in another. As noted, this would go against the identity claim of such theories, which is that any process that constitutes a form of attention in a given instance is attention. Without a sub-personal process constituting attention in one instance but not another being an eventuality, process theories seem insulated against Mole's critique. The following offers an explanation of why Campbell's claims should not be endorsed, and so it provides an explanation of why process theories of attention are not protected from Mole's argument

Campbell's description of conscious attention is not supported by sufficient empirical evidence. Campbell provides empirical evidence to support his argument that certain sub-personal processes are activated after people consciously attend to, or 'experientially highlight', things.[148] What though, are the sub-personal processes Campbell posits that allow people to experientially highlight things in the first place? It is well and good to claim that, when people experientially highlight things, certain sub-personal processes involved in demonstrative reference are activated. However, there have to be sub-personal processes that themselves constitute the very act of 'experientially highlighting' things. It will now be argued that the binding process can constitute 'experientially highlighting' things in some cases, and it is thus a form of conscious attention under the interpretation of attention by

[147] See Campbell (2002, pp. 10-13).
[148] See Nissen (1985).

process theories. As a result, given that in other instances the binding process, when active, does not constitute conscious attention, process theories will still be subject to Mole's critique.

As discussed, Campbell thinks that there are two forms of closely related attention that people draw upon when they look out at the world. These are 'conscious attention' and 'low level' attention.[149] Low level attention is a pre-conscious occurrence constituted by the binding process, and conscious attention is something that involves experientially highlighting things – something for which he has not provided a sub-personal explanation. The problem here is that the available evidence points to the conclusion that in some cases there is not anything 'low level' that the binding process constitutes. It points rather to the conclusion that the binding process can constitute 'experientially highlighting' things in the case of some visual searches.[150] In effect, Treisman's studies seem to show that the binding process can constitute conscious visual attention in the way that Campbell describes it.[151] This may be only for a fraction of a second, as Mole notes, but this is enough.[152] When the binding process is activated, it can constitute the task of consciously looking at things in the environment, or of 'experientially highlighting' them, so that information concerning them can be used for further processing by other sub-personal processes. This does not appear to be low level, or pre-conscious.[153] If Campbell cannot produce evidence of different sub-personal processes involved in conscious attention in these cases, other than the feature binding process, the available evidence should be used, and the conclusion that the binding process can constitute conscious visual attention should be endorsed. This leaves process theories of attention with the same problem that Mole identifies, because the binding process sometimes is conscious attention and sometimes it is not under the interpretation of attention by process theories.

[149] Campbell (2002, p. 31).
[150] See Treisman and Gelade (1980).
[151] See Campbell (2002. pp. 31-33).
[152] Mole (2011, p. 37).
[153] Ibid.

Process theories face the problem identified by Mole. However, the possibility for an acceptable process theory of attention to be created has not been dismissed. Evidence may emerge to circumvent Mole's argument so that it ceases to be fatal. What is clear, though, is that existing empirical evidence gives good reason to doubt the conception of attention provided by process theories. In what follows, it will be demonstrated that not only does empirical evidence give good reason to doubt such theories but that there are also conceptual reasons to do so too, and that such theories have been superseded by Mole's cognitive unison theory in terms of a sub-personal account of attention. Before turning to this, classical adverbial theories, and contemporary philosophical accounts of attention will be discussed. These theories, like process theories, will be found to provide inadequate theories of the metaphysics of attention.

4. Adverbial theories of attention

4.1. The basic claims of adverbialism

Adverbial theories of the metaphysics of attention have been formulated only by a few philosophers and psychologists.[154] Such theories argue that there is no particular process that can be characterised as attention. Instead they claim that the manner in which various processes are carried out by a subject whenever they attend to something is what can be characterised as attention.[155] This is why such theories are called 'adverbial'. They do not conceive of attention as a particular thing, but instead conceive of it adverbially in terms of a way that particular things are carried out. For example, an explanation of what it is to be careful, an adverbial concept, is not provided in a description of any particular thing but rather in a description of a way that particular things are done. In essence, an adverbial theory of anything will consider the thing to be described as a particular kind of modification of

[154] See Bradley (1886), Ryle (1949), White (1964) and Mole (2011).
[155] Mole (2005, pp. 57-63).

something else, just as an adverb modifies the verb in a sentence.[156] In the following, the three adverbial theories of attention that were created before the twenty-first century will be assessed, beginning with the classic adverbial theory of the psychologist Francis Bradley.

4.2. Bradley's adverbial theory

Bradley argues that attention should be understood only in terms of a particular way that processes are carried out by a subject, and not as a specific entity. His is the original adverbial theory of attention. He claims that attending occurs only in cases where the processes of a subject are motivated by their conscious interests, and they result in being engrossed with the product of those interests.[157] For example, if you are motivated by your interests to solve a Sudoku puzzle, you will think about the solutions to it by looking at the various numbered squares and reasoning about their relationships with one another. You will become 'engrossed' in solving this puzzle so that its content occupies the forefront of your consciousness. This is a case of attending. It is an event in which you initiate processes motivated by your interests, such as thinking, looking and reasoning, and become engrossed in the product of these interests. Indeed, in the most familiar cases of attending to something or other, this account is adequate. However, a concrete account of the metaphysics of attention is the focus of this chapter, and in order to provide this Bradley's theory must be able to give an account of all examples of attending. Mole demonstrates that it cannot.

Motivation by interest suggests a conscious intentional act. Mole points out that sometimes people attend to something without any conscious motivation, let alone something as strong as interest.[158] This occurs in cases of involuntary attention. For example, consider a case where a sudden flash of light grabs your attention. You do not look at it out of any

[156] This is seen in adverbial theories of perception such as those of Ducasse (1942) and Chisholm (1957), in which the phenomenal character of perceptual experience is argued to be determined by that experience being modified in some way.
[157] Bradley (1886, p. 316).
[158] Mole (2011, p. 47).

interest, rather it seems automatic. It only catches your attention for a moment. You do not become engrossed with it in any way. You just glance at it, possibly consider what it is, and then turn your attention to something else. This is something commonly considered to be a case of attention, yet it does not possess any of the characteristics that Bradley claims are necessary for something to be a case of attention. As such, Bradley's account is inadequate. It is not broad enough to account for all events that people take to involve their attention.

Mole points out that Bradley's account not only leaves out cases where attention is being used but also includes cases in which attention is not.[159] He gives an example whereby someone is motivated by interest to exercise various processes yet is not attentive to the product of their interests. He describes someone who has been at their desk for many hours reading and who cannot concentrate on their work. They are distracted from what they are doing, possibly by the sound of a radio or their hunger. Mole claims that, under Bradley's conditions, this is an event in which the individual is attending to what they are doing, yet common sense tells us otherwise.[160]

Mole does not take into account Bradley's full requirement for something to be a case of attention, and so his example does not damage Bradley's account of attention. Although the individual trying to read may be motivated by their interests to initiate the processes involved in reading, they are not engrossed with the product of their interests, and, for this to be a form of attention under Bradley's theory, the individual must be engrossed with the product of their interests.[161] Moreover, Mole's argument that there are cases of attention that do not fit into Bradley's account of attention should not be accepted generally. Any case that involves an individual being 'engrossed' with the product of his/her interests will be a case of attention. The word 'engrossed' is something that identifies somebody who is concentrating on what they are doing, or are focusing on it, and so it describes an important aspect of the

[159] Ibid.
[160] Ibid, pp. 47-48.
[161] Bradley (1886, p. 316).

experience that people have of attention. Given this, Bradley's approach does not include any cases that people do not consider to involve their attention. Any case in which an individual is motivated by his/her interests to initiate certain processes and becomes engrossed with the product of these interests will be a case that involves the use of attention. Consequently, Bradley's classic adverbial theory of attention is not as flawed as Mole argues it to be. Nevertheless, Mole does identify a fatal flaw in the theory: it is not broad enough. It cannot account for cases in which people are considered to be paying attention to something yet are not doing this out of any interest, and do not become engrossed in that thing, as in some cases of involuntary attention. Among many other things, Bradley's account needs to accommodate such cases to give an adequate account of the metaphysics of attention. As it cannot, it must be rejected here. The adverbial theories that followed Bradley's will now be assessed.

4.3. The adverbial theories of Ryle and White

After Bradley, two adverbial theories of attention were developed. Both theories are adverbial because they do not conceive of attention as an identifiable entity, but as a way certain processes – in their case activities – are carried out. The first of these is Gilbert Ryle's theory of attention, which can be found in his classic work The Concept of Mind.[162] Ryle conceives of attention in terms of dispositions. For him, attention is something that occurs when subjects are doing something as a result of their dispositions to do it and have dispositions to continue doing it. He argues:

> To describe someone as now doing something with some degree of some sort of heed is to say […] that he is actually meeting a concrete call and so meeting it that he would have met, or

[162] Ryle (1949).

> will meet, some of whatever other calls of that range might have cropped up, or may crop up.[163]

Alan White and Mole both find fault with Ryle's theory. They argue that attention cannot be considered just in terms of a subject doing something and of her/his dispositions to do it and to continue doing it.[164] They are correct. The following example will demonstrate why Ryle's concept is problematic.

Some people often twiddle their fingers. They have dispositions to do this and to continue doing it as a result of an issue with fidgeting that they do not consciously control. They are often not aware of twiddling their fingers and seem to be able to focus on other things while doing it. They do it 'absent-mindedly'. Every time they twiddle their fingers it is necessarily an activity that involves their attention under Ryle's theory. Common sense is at odds with this, as when they are not aware that they are twiddling their fingers it would generally be considered an activity that does not involve their attention, but rather as something that occurs as a result of their sub-conscious dispositions. Ryle's theory does not take into account that an activity, to involve their attention, should require that they go about doing it in a certain way at that time, that they focus on the content of it, or are directed on its content in some way, as opposed to other things. As was explained in the account of the folk psychology of attention in the last chapter, this is one of the most basic things people hold about attention, and a basic theory like Ryle's must be able to accommodate it.

Ryle's theory of attention is based on an ordinary language interpretation of attention, which does not delve beyond the personal level. In effect, Ryle tries to give a folk psychological analysis of attention, like the one given in the last chapter. The problem here is that his analysis is flawed, even in terms of a folk psychological analysis. The folk

[163] Ibid, p. 141.
[164] See White (1964, p. 14), Mole (2011, pp. 49-50).

psychological understanding of attention is not of something that is instantiated whenever an individual is doing something and has dispositions that both cause them to do it and to continue doing it. This is because there can be cases that fit this dispositional characterisation that are totally at odds with the basic understanding people have of what attention is, such as that provided in the last paragraph. Also, Ryle does not attempt to explain the brain mechanisms that might constitute attention. He cannot necessarily be criticised for this for a variety of reasons, the most obvious of which are the aims of The Concept of Mind, in which he gives this characterisation of attention. Ryle has pointed out that his book could be 'described as a sustained essay in phenomenology'.[165] In this way, Ryle shows himself not to be attempting to give a genuine account of the metaphysics of attention. Rather his is an account of its superficial qualities, identified according to his behaviourist analysis of ordinary language. Given that Ryle's theory clearly does not delve beyond the personal level, and does not even accurately characterise the folk psychological concept of attention, it cannot be considered useful to any comprehensive theory of the metaphysics of attention.

White, after Ryle, developed a theory of attention that can be explained by the following passage:

> Simply to say that someone is attending, or paying attention, gives us no more clue as to what activities he is engaged in than simply to say that he is practising. What 'attending' tells us is that his activities and energies, whatever they are, are directed to and focused on something which occupies him.[166]

The problem with White's account is twofold. First, it is extremely vague. What kind of energies does a subject direct on something when he or she is attending? They must have

[165] Ryle (1990, p. 188).
[166] White (1964, p. 7).

some characteristics. Are they cognitive processes? They could be anything, and it is not at all clear what they are. Moreover, how are such energies directed and focussed? This must occur in some manner or, if it does not, there needs to be a substantive explanation of why not. White does not fill in any of these gaps.[167] Second, White, like Ryle, attempts to give an account of attention through an analysis of ordinary language.[168] This means that the extent of his analysis does not go beyond a folk psychological interpretation of attention, and as such it cannot constitute a tenable theory of the metaphysics of attention.

White's theory was to mark the end of interest in the nature of attention as a philosophical topic, in its own right, for 40 years. Indeed, even though prominent philosophers like Campbell, Martin, and Peacocke all discussed attention in their work, it was only ever one of their peripheral and not primary interests.[169] In particular, after White's theory was published in 1964, there were no significant attempts in philosophy to give an account of the metaphysics of attention. That is, until several theories of attention were developed in the last decade. They will now be discussed.

5. Contemporary personal level accounts of attention

Although attention has played a role in many theories of perception (in particular visual perception)[170] and has been part of philosophical discussions about things like introspection,[171] demonstrative reference,[172] thought,[173] and memory,[174] it has not itself been studied by philosophers since White's work. That is, until the past ten years where interest has re-ignited about the nature of attention in philosophical discourse. There are now five theories

[167] Mole (2011, p. 87) takes his own theory to be one that fills in these gaps, and he builds upon White's insights in developing his theory.
[168] Ibid, pp. 5-21.
[169] See Campbell (2002), Peacocke (1998), and Martin (1998).
[170] There are many works in which attention plays a role in theories of perception. For an example of this see Martin (2002) for a disjunctivist theory of veridical perception in which attention plays a major role.
[171] See Roessler (1999).
[172] See Campbell (2002).
[173] See Peacocke (1998), and Martin (1998).
[174] See Martin (1992 and 2001).

of attention that have recently come to prominence in philosophy. These are Sebastian Watzl's theory, Declan Smithies' theory, Wayne Wu's two theories, and Mole's theory. Smithies', Watzl's, and Wu's theories will be assessed quickly before moving on to Mole's.

Watzl gives a theory of attention that covers all forms of attention. He sums it up succinctly in the following statement:

> Attention is the conscious mental process of structuring one's stream of consciousness so that some parts of it are more central than others.[175]

Smithies, like Watzl, gives a theory of attention that covers all forms of attention. The basic claims of the theory are in the following passage:

> Attention is what makes information fully accessible for use in the rational control of thought and action. But what makes information fully accessible for use in the rational control of thought and action is a distinctive mode of consciousness. Therefore, attention is a distinctive mode of consciousness. In a slogan, attention is rational-access consciousness.[176]

In Wu's first theory, he gives a complex account of 'conscious attention' in perceptual experience that does not, like the previous two theories, have any concise description that can readily be found in his work. Wu argues that we are in a cognitive mental state when we perceptually attend to an object. For Wu, it is a cognitive state in which something found in the contents of our perceptual experiences is demonstratively represented as that which is attended as opposed to anything else concurrently perceived.[177]

[175] Watzl (2011).
[176] Smithies (2011).
[177] Wu (2011c).

In Wu's second theory, he gives an account of attention as 'selection for action'.[178] He describes it concisely as follows:

> The core idea is that attention as a subject-level phenomenon is a type of selection that plays a necessary role in agency: attention is (more or less) selection for action. The "more or less" acknowledges higher ordered attentional states that supervene on selection for action, but the central point is that the nature of attention is illuminated through the nature of agency.

Although these are all interesting theories of attention, none provides an account of attention that explains the phenomenon at both the personal and sub-personal level simultaneously. While there is some attempt at 'level crossing' in these theories, Watzl's theory being an example of this, none has been truly comprehensive.[179] They are all personal level theories. As a result, none can provide the kind of basic, foundational account of attention that is sought after in this chapter. As was discussed in the first chapter, an adequate account of the metaphysics of attention is 'basic even from the point of view of physics'.[180] This requires that the account of attention that is supported here needs to be able to explain the phenomenon in the most comprehensive way possible. It needs to be the kind of account that underpins all other forms of understanding of the phenomenon, the one that explains how all other forms of acquaintance with attention come about. This means that, if it is accepted that there is any link between our minds and our brains, a satisfactory account of the metaphysics of attention must provide a description of attention that captures it at both the personal and sub-personal levels simultaneously. In other words, it must provide an adequate explanation of how our underlying neural architecture gives rise to attention, as we are acquainted with it through our experience and through common sense. The theories briefly described here make no pretence

[178] The ideas expressed in Wu's theory are described in two works, 'Confronting Many-Many Problems: Attention and Agentive Control' (2011b), and 'Attention as Selection for Action' (2011a) (which is the more complete account).
[179] Watzl (2011).
[180] Mole (2011, p. viii).

to do so, and as such they cannot form the basis of a comprehensive theory of the metaphysics of attention, in the way that metaphysics is understood here.[181] However, there is a theory that does this. It will now be discussed.

6. Mole's adverbial theory: attention is cognitive unison

6.1. Mole's view

Mole develops an adverbial theory of attention in both his book Attention is Cognitive Unison[182] and in his PhD thesis.[183] He describes attention as a way that certain cognitive processes are used. He does not identify attention as a distinct mental entity. Therefore, his theory of attention is an adverbial theory of attention. His theory links the sub-personal processes of our brains to the personal level. It explains why the everyday understanding of attention that people have is the way it is, and it provides a framework that can be used by cognitive scientists and empirical psychologists in their studies of attention. The core of his theory is as follows:

> A subject pays attention if and only if there are cognitive processes that he executes in unison. A cognitive process, P, occurs in unison with the resources in its background set just if it is serving some task, t, of the subject's, and the processes that occupy the resources in the background set are not occupied with activity that doesn't serve t.[184]

An explanation of what Mole means, first by a 'cognitive process' and second by a 'task', will now be provided.

[181] None of this is to say that a purely personal level theory of attention is not useful or valuable by itself. It is only to say that a truly comprehensive theory of the metaphysics attention will go beyond a personal level explanation of the phenomenon. That is, if it is to give the most explanatorily powerful account of that phenomenon possible.
[182] Mole (2011).
[183] Mole (2005).
[184] See Mole (2005, p. 66). Mole gives a characterisation of his theory in his book (2011, p. 51), but the wording is not as suitable for the purposes of this chapter.

For Mole, a cognitive process is a sub-personal process that 'operates on' representations given to a subject, and as an immediate result of doing so gives that subject the capacity to initiate personal level attitudes towards the content of such representations (attitudes such as seeing, believing, remembering, etc.).[185] [186] For an example of a cognitive process, under Mole's interpretation, consider the sub-personal process involved in feature integration. This process acts upon representations of visual information (such as those of shape, colour, movement, etc.).[187] When it does so, it plays a necessary role in making these representations accessible to people's minds in a way that allows people to form personal level attitudes towards their contents. It allows people to see the things that have been visually represented to them.[188] As such, it is an example of a cognitive process, according to Mole's interpretation of cognitive processes. Indeed, any sub-personal process that facilitates the formation of personal level attitudes, by acting on various representations given to a subject, can be characterised as a cognitive process under Mole's formulation. [189]

What cannot be characterised as a cognitive process, under Mole's interpretation of cognitive processes, are either (i) sub-personal processes that do not work on any representations (if such processes exist) and, more importantly, (ii) sub-personal processes that do not directly give subjects the capacity to form any personal level attitudes towards the content of the representations that they work on. Processes of these two categories that Mole identifies include those sub-personal processes that work on maintaining heart rate, balance, breathing, and moving parts of one's body.[190] With this in hand, an account of Mole's interpretation of tasks will now be supplied.

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[185] Mole does not explicitly say that a cognitive process needs to be a sub-personal process. Nevertheless, all of the processes that Mole (2011, 2005) identifies as cognitive processes are sub-personal processes. Also, Mole (2011, pp. 57-58) holds that a cognitive process is the kind of process that can directly determine the content of 'agent level states', by acting upon the representations that form the content of such states. The best explanation of this is that Mole holds that cognitive processes are exclusively sub-personal. This is the view that will be taken here.
[186] See Mole (2011, pp. 57-58)
[187] See Treisman and Gelade (1980)
[188] Ibid.
[189] Mole, (2011, pp. 57-58).
[190] Ibid, pp. 58-60.

Mole's understanding of a task is explained in terms of activities. Mole claims that an activity is something that a subject is doing. He then argues that a task is an activity of a subject's that is guided by a subject's understanding of that activity. As such, under his interpretation, an activity that is not a task is something that is not guided by a subject's understanding of it. For example, seeing something is not a task according to Mole's interpretation (some would claim that it is not an activity either[191]), because people do not bring to bear their understanding of 'seeing' when it occurs. It is a passive happening that is not guided by understanding on their part. For Mole, though, looking is a task. When people look at something, or look for something, they are guided by their understanding of looking. They know what looking for something is, or what looking at something involves, so they set about performing the activity in the way that they do. [192]

For a more complex example to clarify Mole's notion of tasks, consider a case of accidentally cutting one's finger. This is not a task under Mole's schema, even though most people understand what kind of activity it is. It is something that people do not bring any understanding to bear in doing. It happens accidentally, and their understanding of what they are doing does not guide this activity. On the other hand, cutting a loaf of bread is a task under Mole's terminology. When people cut a loaf of bread they understand what they are doing, and so they set about doing it in a way that accords with this understanding – e.g. by running a serrated blade across the bread in a sawing motion. They are engaged in an activity that is guided by their understanding of it, and they are therefore engaged in a task.[193]

6.2. The theory unpacked

Mole's definitions of a 'cognitive process' and of a 'task' provide the basis of his theory of attention. Mole argues that a necessary condition for something to be a case of attention is

[191] Watzl (2010, p. 83).
[192] Mole (2011, pp. 52-53).
[193] Ibid.

that a subject is engaged in a task – which is a personal level activity that is guided by a subject's understanding of it. This will include things like looking for a friend, thinking about a complex formula, watching a documentary, and so on.[194]

A subject must be doing more than performing a task for Mole to consider any given case a case of attention. For Mole, an instance of attention occurs if and only if a subject is engaged in a task and all of the cognitive processes that provide the means to engage in that task, in line with the understanding the subject has of it, are brought to bear in unison in support of it.[195] For an example of what Mole is talking about, consider an individual who is looking for a friend in a crowd of people. Under Mole's interpretation, this person must have various cognitive processes operating in unison at that time for this task to occupy their attention. These cognitive processes, if their understanding of the activity is that it involves looking for the person and remembering what they look like, would include those sub-personal processes involved in feature binding, which allows them to look at various faces, and those sub-personal processes involved in their memory of the person's features (memory retrieval). For Mole, in such a case, if and only if these processes are operating in unison will they be able to engage attentively in the task.[196]

Mole holds that for a set of cognitive processes to be brought to in unison in support of a task, and so for an instance of attention to occur, all the cognitive processes in the set must be available to the task, and must not be brought to bear in aid of any other activity at that time.[197] This means that in the case of the person looking for their friend in the crowd, the sub-personal processes involved in feature binding, which allow them to look at the various faces in the crowd, and those involved in their memory of the features of their friend, must be available to them and must not be involved in any other personal level activity. For example,

[194] Ibid.
[195] Ibid, p. 51.
[196] Mole (2011, p. 51).
[197] Ibid.

Mole holds that if the sub-personal process involved in feature binding is functioning in an activity to allow them to look for a food vendor, it will not be available to help them in their task of identifying the person in the crowd and, therefore, they will not be able to pay attention to their task. The theory requires that all of the relevant processes that sustain their activity of looking for their friend be drawn upon in unison for them to engage in the activity attentively.[198]

From the previous considerations it can be concluded that Mole's adverbial account of attention is the following:

> A case of attention occurs iff a subject is engaged in a personal level activity which is guided by his/her understanding of it, and all of the cognitive processes which provide the means to engage in the activity, so understood, are operating in unison in aid of the activity, and are not being used in any other activity.

Two points of clarification are necessary. First, Mole argues that the understanding a subject has of an activity need not be the right one, and so they may bring the wrong cognitive processes to bear in attentively pursuing their tasks.[199] For example, not any sub-personal processes will help a person to identify their friend in a crowd of people. If their understanding of the activity does not involve looking for her, but instead involves listening for her voice based on their memory of what it sounds like, and they thus utilise the sub-personal processes involved in auditory perception and memory retrieval to try to find her, Mole holds that they will still be pursuing this activity attentively. This is the case, as there will still be a group of sub-personal processes acting in unison in this case that they bring to bear through their understanding of what this activity involves. In other words, under Mole's

[198] Ibid.
[199] Ibid, pp. 60-61.

theory, it will still be a case of attending, even though the sub-personal processes involved in auditory perception are unlikely to assist them in achieving the goal of their activity. Ultimately, all that something needs to be to be a case of attending under the cognitive unison theory, is to be a case where a subject engages in an activity, guided by their understanding of what it involves, and where they use a variety of sub-personal processes in unison as a result of this understanding.[200]

The second point of clarification is that Mole's theory allows cases of involuntary attention to be considered as legitimate forms of attention. On first glance it seems that it does not. For example, when somebody involuntarily attends to a sudden and deafening sound, it could be argued that they are not performing a task as defined in Mole's theory, and are therefore not attending to something under the guidelines of the theory. This is because there is no understanding on their part in initiating the activity of listening to that sound. It is an automatic response to an external stimulus. However, Mole makes explicit that a subject must only be guided by their understanding in an activity for it to be considered a task. Mole argues that no understanding is required on the part of a subject to initiate a task.[201] As will now be explained, this allows proponents of the cognitive unison theory to maintain that involuntary attention is still a form of attention.

When people involuntarily attend to a loud sound, say, their understanding of the activity guides them in what they are doing, although it does not allow them to initiate what they are doing. In effect, it guides them by allowing them to think of the thing they hear as a sound and not as something else, and by allowing them to act accordingly with respect to it, for example, by attempting to discern what created the sound (something which will require them to bring a set of cognitive processes to bear in unison). It is a legitimate case of

[200] Ibid, p. 51.
[201] Ibid, pp. 53-54.

attending under Mole's theory, as are all other cases of involuntary attention to which the same kind of explanation can apply.

6.3. The advantages the cognitive unison theory has over modular process theories

Having now seen what Mole's adverbial theory of attention involves, two of its major qualities as a theory that accounts for attention at the sub-personal level will be discussed. First, the cognitive unison theory will be shown to provide a unified conceptual framework that can coherently account for the sub-personal underpinnings of complex tasks involving the use of attention. Second, the theory will shown to account for the integrated nature of tasks that involve attention. Both of these qualities, it will be argued, demonstrate the superiority of the cognitive unison theory over modular process theories of attention.

In many cases, both the use and cooperation of a variety of sub-personal processes are required for any given individual to turn their attention to something. For example, empirical evidence shows that reading is incredibly complex, requiring the activation of a variety of sub-personal processes in order to be engaged in attentively.[202] Indeed, the evidence even shows that the sub-personal processes that some people draw upon to engage reading attentively differ from those that others use to engage in it attentively.[203] The cognitive unison theory gives a unified explanation of how different people can come to give their attention to complex tasks like reading. It does so by providing a coherent conceptual framework that is sensitive to the relevant empirical data in each context. The means by which it does this will now be explained.

The cognitive unison theory holds that in each case in which attention is used in a task, the set of cognitive processes that are collectively required to help an agent to engage in that

[202] Prat and Just (2011).
[203] Ibid.

specific task, in accordance with his/her understanding of what that task involves, are those processes that constitute attention at that time.[204] First, this allows the theory to account for instances in which the sub-personal processes that facilitate the attentive performance of a task operate in different areas of the brain and vary in their number and complexity. Second, it allows the theory to account for the differences between the kinds of sub-personal processes that different agents will bring to bear in order to attend to the same task, by reference to the different understanding that the agents have of the task in question. Ultimately, the theory can account for complex tasks, like reading, that require the involvement of a variety of sub-personal processes in order to be engaged in attentively and involve the activation of differing sub-personal processes depending on which agent is engaged in the task. It is a strength of the theory, one which is not shared by modular process theories of attention, as will now be shown.

Modular process theories of attention attempt to determine what sub-personal processes constitute attention in various tasks within certain sensory modalities, such as visual perception, auditory perception, and so on.[205] Some complex tasks may involve the sub-personal processes identified by such theories in these modalities, but, as with reading, such tasks will also involve other parts of the brain. An explanation of what constitutes attention in these tasks is unavailable to modular process theories. This makes them explanatorily deficient in comparison to the cognitive unison theory, given that they cannot account for attention when the tasks in which it is used go beyond the most basic level of complexity. Also, as was demonstrated with reading, different individuals often use differing sub-personal processes to engage in the same task attentively.[206] Given this, the approach of modular process theories, which is to identify attention with a particular sub-personal process, or a

[204] Mole (2011, p. 51).
[205] For examples of such modular theories see Berger et al. (2005), Driver and Spence (1998), Moore, et al. (2003), Rizzolatti, et al. (1987), and Spence and Driver (2004).
[206] Prat and Just (2011)

particular set of them, is flawed in the case of complex tasks. They cannot explain why, or how, different individuals use different processes to engage in the same task attentively, as they identify attention with particular sub-personal processes in such tasks. Indeed, such cases demonstrate the strength of the cognitive unison theory over modular process theories of attention, given that the cognitive unison theory can explain why the sub-personal processes different agents bring to bear in the same kind of task often differ. With this in hand, the second point of strength that the cognitive unison theory has over modular theories of attention will now be discussed.

The cognitive unison theory can explain the integrated nature of tasks involving attention. For example, if an individual attends to the content of a fictional novel, and they understand what reading involves correctly, it seems, to them, as if they are occupied in one task and are bringing their attention to bear in it. It does not seem, to them, as if they are engaged in multiple tasks like looking, thinking, and imagining. In other words, novel readers do not feel like they are integrating multiple activities at once or feel like they are giving multiple kinds of attention to one thing when they read. Rather, they feel like they are attentively performing one task. Through the cognitive unison theory this can be explained by pointing out that the various sub-personal processes that sustain the attentive performance of the task of reading, such as those involved in imagination, thought, and visual perception, are all operating in unison at the sub-personal level.[207] They are all working together in such a way that reading a novel seems to be one unified task that involves attention to readers, and does not seem to be a set of personal level attitudes that they actively integrate in their mind**.**

The cognitive unison theory has a clear benefit over modular process theories because of the explanation it provides of the integrated nature of attention. It provides a better account of how sub-personal processes combine to generate the conscious experience that people have

[207] Mole (2011, p. 51).

of attention. Most modular process theories, like Treisman's, try to identify individual uniquely attentive processes at the sub-personal level that are involved in sensory experience.[208] However, most tasks that involve attention, like reading a book or writing an email, are not purely sensory. The experience people have of attention is not one of several distinct kinds of activity at the personal level, some that are sensory and others that are not. It is an integrated experience of a single kind of thing, their attention, being given to a particular task. The cognitive unison theory can explain this, whereas modular process theories cannot. Ultimately, modular process theories describe attentive mechanisms in different sensory modalities, and so cannot give any indication of how, and why, attention to a task feels as if it is something that transcends these modalities. The cognitive unison theory can, and so has an advantage over modular process theories of attention in this regard.

To sum up the two points in this section, the cognitive unison theory explains attention in a far more comprehensive way than any modular process theory can. It gives a full account of how attention operates in our brains and not one that demarcates attention into different attentive brain processes. This allows it to account for attention in many complex tasks, and to provide an explanation of the integrated feel of attention at the personal level, in ways that modular process theories of attention cannot. This is not to devalue or deny the importance of identifying particular brain processes involved in things like sensory selection. It is to demonstrate that a complete account of attention will provide an account of the phenomenon that fits both the empirical evidence and the unified experience that people have of attention, and it is clear modular process theories do not do this as well as Mole's theory. Therefore, Mole's theory is superior to modular process theories of attention as an account of the metaphysics of attention.

[208] See Treisman and Gelade (1980).

6.4. Mole's theory as the best theory available at the sub-personal level

Although there has been an explanation of how the cognitive unison theory is superior to modular process theories of attention, no reason has yet been given to believe that it is superior to higher order process theories of attention, which identify all instantiations of attention with a single sub-personal process. The reason that the cognitive unison theory is superior to higher order process theories of attention is explained below. Then, an argument in favour of higher order theories of attention by Christopher Peackocke will be shown to be ineffective against the cognitive unison theory. This will lead to the conclusion that the cognitive unison theory is the best available account of attention at the sub-personal level.

Alan Allport criticises higher order process accounts of attention, pointing out the dissimilarity between the various sub-personal processes that facilitate the kinds of personal level things that are attributed to an attentive individual. These processes which support things like smelling, looking, thinking, imagining, and so on, often occur in different parts of our brains. [209] Allport is right on this point. For example, the visual cortex is not something that is often investigated when the focus of studies is on auditory processes. Ultimately, it seems rather odd to identify a single process as the thing that constitutes attention in all attentive activities, given the wide diversity in the sub-personal processes that have been found to be involved in attentively performing such activities. The thing that constitutes attention in different activities seems better explained by the identification of a variety of different processes in different cases. On the other hand, the cognitive unison theory does explain how various sub-personal processes can all work together in various attentive activities, and so can constitute attention without us having to identify it with a particular higher order process. It is to be preferred as it is simply more in line with empirical evidence.

[209] See Allport (1993, p. 203f).

Despite the support that the cognitive unison theory finds in existing empirical evidence, an argument by Peacocke gives reason to reconsider whether attention might be better conceived of in terms of a higher order process. The argument turns on the everyday understanding that different kinds of activities that involve our attention often interrupt each other and compete for our attention.[210] For example, an individual's perceptual attention to an object may be interrupted by them turning their attention to their memories, or it may be interrupted by them shifting their attention to their thoughts about some matter. Peacocke argues that competition for a single sub-personal process of attention, or 'single higher order resource', seems to best explain this everyday phenomenon, so giving higher order process theories an advantage over theories like the cognitive unison theory.[211] For Peacocke, if there were different sub-personal processes involved in attention, rather than it being a single higher order process, then attention would not be interrupted by different activities performed attentively. The processes involved in these activities would not overlap significantly and so would not impede each other.[212] As will now be demonstrated, this is not an effective argument against cognitive unison theory.

In Mole's theory, when people engage in a task attentively they need to have all of the relevant sub-processes that facilitate the attentive performance of that task operating in unison.[213] This means that, under the theory, if any sub-personal processes that facilitate the attentive performance of one task are stripped from that task to serve in the performance of another task, the attentive performance of the first task will be interrupted. For an example, consider a case in which a person who is paying attention to what they are reading suddenly becomes distracted by a sound and wonders what it is. In this case, the person's attention to what they are reading is interrupted by it shifting to the sound. According to the cognitive

[210] The idea of attention being interrupted is part of the folk understanding of attention as a limited resource.
[211] Peacocke (1998, pp. 66-67).
[212] Ibid.
[213] See Mole (2011, p. 51).

unison theory, the person has to draw upon various cognitive sub-processes to engage attentively in both reading and wondering what the sound is. If at any stage some of these processes overlap substantively, the theory holds that the cognitive unison that one task has (reading) will be interrupted because some of its processes are being drawn upon by another task (thinking about the sound), and will be unavailable.[214] So, when this actually happens in the case described, the theory holds that the sub-personal processes that facilitate the attentive performance both activities do in fact overlap, thus causing attention in one of them to be interrupted.

The explanation provided by the cognitive unison theory concerning the interruption of attention is a convincing one. The tasks that people engage in attentively are often complex and need to be supported by many sub-personal processes, processes that are often required for a variety of other things.[215] When people try to do several complex things at once these tasks compete for the available processes.[216] The tasks cannot all use them, and so the cognitive unison theory postulates that the unison of processes required for the attentive performance of one task is shattered when one of the processes required to facilitate it is brought to bear in aid of another task.[217] This provides a plausible explanation of why attention is often interrupted. It is also a clear response to the argument put forward by Peacocke. It is a response that suggests that the best explanation for the interruption of attention is not a simplistic one in which a single higher order process constitutes attention. Rather it suggests that the best explanation is more complex, with a variety of sub-personal processes required for the attentive performance of different tasks, some of which overlap at given times, resulting in the interruption and transfer of attention.

[214] Ibid.
[215] See Mole (2011, pp. 41-45) for a discussion of the empirical evidence that shows that tasks performed attentively often compete for available resources.
[216] Ibid.
[217] Ibid, pp. 74-82.

It could, however, be argued that Peacocke has a point concerning simple tasks that do not involve sub-personal processes that overlap substantively. For example, looking at something often seems to be interrupted by thinking about something, and both are activities that involve attention. It does not seem like the sub-personal processes required for these tasks overlap substantially, given their obvious differences, and so it seems best to explain the interruption of attention in such cases by reference to an overriding process that is involved in all attentive activities. The problem with such a response is that it describes things like looking and thinking in simple terms, such that they seem to be very different kinds of task. In reality, though, looking at something and thinking about something are often tasks that are related. Both will often need to draw upon the same sub-personal processes, because most of the time people do not simply look at something for no reason or think about something for no reason (although this does happens sometimes). In effect, many day-to-day tasks are complex, and looking, thinking, planning action, and so on are all important components of such tasks. For example, when people look at a bus timetable, they are not simply looking at it but are thinking about it and making plans as a result of the information that it contains. Their attention can easily be interrupted in this task by intrusive thoughts, because these thoughts will rely on some of the same sub-personal processes. Therefore, even in response to seemingly simple cases like this, proponents of the cognitive unison theory can argue that the best explanation for the interruption of attention is the competition between tasks for a variety of sub-personal processes.

It must be stressed here that some tasks do not use any sub-personal processes that overlap substantively. However, when two tasks like this are performed simultaneously, the attentive performance of one task is not interrupted in favour of the attentive performance of another task. Both can be performed attentively. Empirical evidence and the psychological

analysis of such evidence make this clear.[218] Also, the division of attention between tasks is part of the folk psychological concept of attention that was identified in the last chapter. For example, it makes perfect sense to describe somebody as driving their car carefully and as being engaged in a chat with a passenger, dividing their attention with little difficulty between the two. As will be made clear later in this chapter, the ability of the cognitive unison theory to explain the division of attention between such simple and/or unrelated tasks is a great strength of the theory. The point here is that the cognitive unison theory can give a good explanation of why attention in certain tasks can be interrupted by attention to other tasks on the basis of the tasks competing for available processes. As such, the cognitive unison theory faces no real challenge from higher order process theories on the basis of Peacocke's argument.

To sum up, the cognitive unison theory does not need to rely on a central unified mechanism to facilitate the performance of a variety of different tasks that involve attention, as higher order process theories do. As such, it can explain the existing empirical evidence, which suggests that there are a variety of different brain mechanisms that facilitate the attentive performance of different tasks, better than any higher order process theory can. The cognitive unison theory can also respond to Peacocke's argument in support of higher order process theories of attention. Moreover, as was made clear in the last section, the theory can explain the sub-personal complexity of many tasks involving attention and the integrated experience that people have of attention, better than any modular process theory. The cognitive unison theory is the best available theory to explain the metaphysics of attention at the sub-personal level. The theory will now be demonstrated to have the capacity to explain why the folk conceive of attention in the way that they do. This will assert its place not only as the best available theory of the metaphysics of attention, but also as a good theory of the

[218] See Allport, Antonis and Reynolds (1972), Allport (1987), Botvinick et al. (2001), Cohen et al. (1990), Duncan (1996), Mozer (1991), Mozer and Sitton (1998), Navon (1985), Navon and Miller (1987), and Schneider and Detweiler (1987).

metaphysics of attention, and so as the theory which provides the empirical answer to the question 'what is attention?' given in this thesis.

7. Cognitive unison and folk psychology

The naïve understanding that people have of all things rarely, if ever, involves anything beyond a superficial insight into their nature. As has been demonstrated over the course of human history, a detailed and accurate understanding of the nature of things can only be developed after appropriate empirical research.[219] However, the naïve understanding that people have of any given phenomenon is not something that should be ignored once empirical investigation into the nature of that phenomenon has occurred. This naïve understanding itself plays an important role in establishing the conceptual accuracy of an account of that phenomenon that is developed after empirical investigation.[220] It is an explanandum for such an account, and the better it is explained by it, the more conceptually accurate that account is. Moreover, if the naive understanding cannot be explained by the empirically based account in any coherent manner, then the empirically based account of the phenomenon cannot adequately be said to describe the phenomenon it claims to. This position will now be set out. It will then be shown how this position applies to an account of the metaphysics of a mental phenomenon, such as the account of attention provided by the cognitive unison theory.

Consider the case of water. If an account of water that is based on empirical evidence were not required to explain the thing that non-experts understand water to be, which is that it is a liquid, that is generally odourless, that it is found in earth's oceans, lakes and so on, then the thing that water is constituted by could be claimed to be anything (be that an element, a

[219] For example, see Pujolar (2013, pp. 1761-1762) for an account of the reproductive capacities of eels that is informed by empirical evidence. This is in contrast to Aristotle who, because of empirical research on eels, came to the conclusion that eels spontaneously came into being from the mud.

[220] It must be noted that this only applies to phenomena which people are acquainted with in their everyday lives. Accounts of phenomena that non-experts have no acquaintance with, and no understanding of, need not have any relationship with the naïve understanding people have of the world.

molecule, or anything else identified through scientific investigation). Ultimately, the account would not need to identify water as H_2O. Rather it could identify water as something that is radically different, given that there are no constraints on the properties that need to be explained by the thing that is identified as water. Clearly, this is absurd. An adequate account of what water really is should be able to explain why at least some of the properties that non-experts understand water in terms of – that it is an odourless liquid that is found in lakes, that quenches their thirst, and so on - are the way they are. The reason for this is that for it to be an adequate account of water, for it to be an empirically based account of the same phenomenon that people experience and are familiar with, it should be able to explain the way water manifests itself to people in the way it does. If it does not, then there is no guarantee that the account is about the same thing that non-experts are familiar with.

Just like with water, if an account of any phenomenon is to be developed in accordance with available empirical evidence, and this phenomenon is claimed to be one that non-experts are familiar with, then at least part of the everyday understanding people have of the phenomenon should be able to be explained by this account. The reason for this is that to justify the claim that this account is of a phenomenon that non-experts are familiar with requires that the account have at least some capacity to explain why non-experts understand the phenomenon in the way that they do. That is, there is a requirement that the account has some capacity to explain why people experience the phenomenon in the way that they do in the various different contexts in which they encounter it, and why, to them, it seems to be a particular kind of thing. Without this capacity, there is no evidence to suggest that the phenomenon that has been identified in this account is the same as, or is in anyway related to, the one non-experts are familiar with. The kind of explanation required here need not be a total one, but the better this account explains why non-experts understand the phenomenon in the way that they do, the greater claim it has to conceptual accuracy. Indeed, by providing a

comprehensive explanation, such an account gives comprehensive evidence that it is an account of the same phenomenon that people encounter in their lives.

Obviously, any considered account of a phenomenon, based on the latest empirical evidence, will not be the same as the understanding non-experts have of that phenomenon. It will be an account of how an underlying reality gives rise to the more naïve impressions that people have of the phenomenon in question. Some of these impressions may be illusory, and may not actually be of properties of the phenomenon as non-experts think that they are. This though, still requires that a considered account of the phenomenon has some capacity to explain these illusory impressions. In other words, it requires an account of why they appear to be a certain way, or an account of how people could come to understand this thing in such a way, but how reality actually differs from this. For an example, objects seem to have colour as part of their physical properties to non-experts. A considered account what colours are, informed by empirical evidence, can explain why non-experts understand colours to be physical properties of objects, but can also make clear that they are not in fact physical properties of objects, but only appear to be so due to the relationship between objects, light, and an observer.

The explanatory task described in the preceding paragraphs applies for accounts of the metaphysics of mental phenomena which the folk are familiar with. Non-experts have a naïve understanding of mental phenomena like attention, the emotions, beliefs, desires, and so on. This understanding comprises their folk concepts about these phenomena. These folk concepts, although often inaccurate and not informed by empirical data, are still concepts concerning the same kinds of mental phenomenon that many empirically informed accounts of their metaphysics intend to describe. In order to provide a good account of the metaphysics of a phenomenon that the folk are familiar with, which explains the phenomenon in the most comprehensive way possible, some explanation of why the folk have the concepts about the

phenomenon that they do, and how reality differs from this, should be provided. By doing so, such an account can show itself as capable of explaining how and why the mental phenomenon seems the way it does to non-experts, that is why it seems to them to be something with certain functional roles, and phenomenological features, and so on. Through doing something like this a good account of the metaphysics of a mental phenomenon can be demonstrated as conceptually accurate, in that it can comprehensively explain how people are acquainted with the mental phenomenon in question, and why they come to understand it in the way they do. It can then assert itself as empirically accurate, in that it can give an explanation as to what the phenomenon is really like, in line with the available empirical evidence.

In sum, once an appropriate account of the metaphysics of any mental phenomenon has been developed, it should be possible to look back and say 'this is why we had that initial impression, and this is what is really going on'. If this is possible, it is possible to show that the naïve understanding that people have of the mental phenomenon has been surpassed and a more sophisticated account, an account that really explains what is going on, is available. If it is not possible to say the aforementioned statement, then there is no certainty that the nature of the mental phenomenon that was sought to be identified has been identified. The phenomenon identified through empirical investigation could be anything in such a case, and may not be in any way related to what non-experts are familiar with.

For an example of a theory of the metaphysics of a mental phenomenon needing to explain folk concepts, consider pain. If one seeks to provide an account of pain but does not try to explain the most basic parts of the folk psychological concept of pain, which is that it is (i) an unpleasant feeling and (ii) allows people to recognise that their body is damaged in some way, then the account of pain that is arrived at, based on empirical evidence, could be one that identifies pain as a phenomenon constituted solely by parts of hair follicles. This is

obviously an absurdity, but the point in it is clear. If one seeks to provide an account of the metaphysics of a mental phenomenon, and the folk are familiar with the same phenomenon, then one must have some capacity to provide an explanation of why the folk understand it in the way that they do. If there is no explanation, then there is no guarantee that the account relates substantively to what it was intended to, given there is no evidence that the thing one has identified is the phenomenon that the folk are familiar with. [221]

Given what has been said, any theory that gives an account of the metaphysics of attention should be able to explain at least some aspects of the naïve understanding that people have of attention, if the theory can be justifiably said to describe what it purports to describe. In other words, it should be able to explain some aspects of the folk psychological concept of attention, as this will strengthen the claims the theory has to conceptual accuracy, given that it will allow the theory to show that it relates to the same kind of phenomenon that non-experts are familiar with. In what follows, the theory of attention as cognitive unison will be assessed to see how it fares in explaining as many aspects of the folk psychological concept of attention as it can.

The cognitive unison theory, it will be argued, asserts a strong claim to conceptual accuracy because it is able to explain why six aspects of the folk psychological concept of attention, expounded in the last chapter, are the way they are. In some of these cases, the cognitive unison theory will also be demonstrated to develop an account of attention that is more informative than the folk concept in accounting for the phenomenal experience that people have of attention. Before this, though, the theory will be shown to relate to the same kind of mental phenomenon that non-experts understand attention to be – i.e. that it concerns

[221] It may be that the phenomenon they have discovered can explain the naïve understanding that people have of a particular mental phenomenon, but that they do not know how it does so. However, this is not a good position to be in. There would be no evidence to show that the theory does explain the naïve understanding that people have of that phenomenon, and so it would not be justified to assume that it does, and so would not be justifiable to assume that the thing that it does describe is in any way related to what non-experts are familiar with.

something that is used in the mental acts of an agent. This is the most important task for the theory. It provides the framework for showing that the theory can explain different aspects of the folk concept. This is so, because it first demonstrates that the theory concerns the same mental phenomenon that people are acquainted with in their everyday lives – attention. From here, it can then be shown how the set of underlying properties attributed to attention by the theory explain both how, and why, non-experts come to conceive of attention in the way that they do.

7.1. The object of explanation.

Under the folk psychological concept attention is something that people bring to bear voluntarily and involuntarily in their mental. It has a similar form under the cognitive unison theory – i.e. it is the set of cognitive processes that people bring to bear in unison, with understanding, in an activity.[222] The difference here is that the thing brought to bear in an activity is much more complex in the cognitive unison theory, and is more in line with empirical evidence. It is in this way that the interpretation of attention provided by the cognitive unison theory describes the same kind of phenomenon as the folk concept but gives a more advanced account of it is that is informed by empirical evidence, which is what is required of a good theory of the metaphysics of attention. However, there are two caveats.

The first caveat is that the folk believe that attention is often brought to bear involuntarily. This is not specified by the cognitive unison theory. However, it was made clear earlier that the cognitive unison theory can explain this commonly experienced phenomenon, so not problem is faced by the theory on this front.[223] The second caveat is that the folk concept specifies mental acts, whereas Mole's theory does not, making them not related in this, the appropriate way. However, given the definition of cognitive processes that

[222] Mole (2011, p. 51)
[223] See section 6.2 of this chapter.

Mole gives this problem is avoided.[224] The sub-personal processes that allow for the performance of the physical aspect of any act (i.e. those that allow one to move one's arm or legs, regulate one's breath, etc.) do not operate on the representations given to a subject in a way that allows a subject to form personal level attitudes towards the content of such representations (i.e. seeing things, thinking about things, wondering about them, etc.). It is necessary that they be able to do this, to be considered cognitive processes in Mole's terms.[225] It is only the sub-personal processes that underpin mental acts that do this appropriately. As such, it is only those acts that the folk consider to be mental acts that can involve cognitive processes under the cognitive unison theory. Therefore, the cognitive unison theory of attention describes the same kind of acts in which attention is used as does the folk concept of attention. However, it does so by accounting for what attention is beyond the naïve impressions that the folk have of it, namely in terms of something that comprises a variety of different cognitive processes operating in unison, from case to case. In this way, it gives an explanation of the same phenomenon as the folk concept, but a more informative one that describes the underlying mechanisms that can come to make up attention, depending on the context.

7.2. Explaining the belief that attention is a single multi-purpose phenomenon

Proponents of the cognitive unison theory can explain why the folk psychological concept of attention is of a particular multi-purpose mental phenomenon that people use in a variety of different mental acts, while maintaining that attention is not constituted by any particular

[224] See section 6.1 of this chapter.
[225] Mole (2011, pp. 57-59).

phenomenon. This will now be made clear through two points. First, simple reasons as to why the folk concept of attention formed as a concept of a particular mental phenomenon will be supplied. Second, it will be demonstrated that the cognitive unison theory can supplement these reasons and give a comprehensive explanation of why the folk conceive of attention as a particular phenomenon, while maintaining the core claim of the theory that attention is not to be identified with any particular phenomenon.

It is the role of folk psychological concepts to be communicative and explanatory tools, things which people can use in order to understand their own minds and those of others. Given this, there needs to be a modest set of concepts that flexibly pick out a wide range of things, so that non-experts can become familiar with them and can use them effectively in communication with each other. This is in part responsible for why non-experts consider attention to be a single determinate entity across cases, as will now be argued.

People often bring something to bear in a variety of activities that allows them to concentrate their consciousness on the content of those activities (something that allows them concentrate on something visually, concentrate on what they are thinking, and so on). This kind of kind of concentration has different characteristics in many different activities. For example, the kind of concentration involved in thinking about some matter does not feel directed out to the world, whereas concentrating on something in visual perception does. Despite this, non-experts hold that a single determinate entity, their attention, is the thing that they draw upon in order to concentrate their consciousness on the content of these activities. They do not think that it differs across cases but is rather a single, multi-purpose entity. They believe this because it is expedient to do so. Ultimately, having a complex set of concepts about a range of different mental phenomena used to concentrate in different activities would be ungainly and impede communication. On the other hand, a concept of a single multi-purpose entity, attention, neatly explains how people can come to concentrate their

consciousness on the contents and objects of a wide range of mental acts. Given this, the folk use the simple concept that has the wider range of application.

The cognitive unison theory can supplement this explanation of why the folk psychological concept formed to be about a particular thing in the way it did. Under the cognitive unison theory, people bring various different cognitive processes to bear in unison in aid of an activity when they attend, and they do this in accordance with their understanding of what the activity involves. However, it is not as if people are aware of what these processes are when they use them. Indeed, people are not aware of using particular parts of their brains when they use their attention, and it does not seem possible that they ever could be aware of using particular parts of their brains. So, a proponent of the cognitive unison theory could argue that, because non-experts understand what they are doing when they attend, but not what it is they are doing it with, they have developed a folk concept of a single multi-purpose mental phenomenon to explain what it is they are doing it with. In other words, a supporter of the cognitive unison theory could explain why the folk hold that attention is a single multi-purpose mental phenomenon by noting that the folk do not really know, and cannot know, what it is that they are drawing upon when they concentrate on things. Therefore, they explain this unknown by conceiving of what they draw upon as a single multi-purpose mental phenomenon.

Proponents of the cognitive unison theory can then give a complex explanation of what is actually brought to bear when people attend. They can do so by agreeing that people are bringing something to bear with understanding in an activity when they use what they think of as their ‘attention’. However, they can then argue that it is not the simple multi-purpose entity that the folk think it is but is something far more complex that is constituted by different processes operating in unison when used in different activities.[226] This conception is

[226] Ibid, p. 51.

something that is in line with the evidence, unlike the concept of attention as a single entity, which higher order process theories endorse, as discussed earlier in the chapter. As such, the cognitive unison theory can not only comprehensively explain why the folk conceive of attention as a particular determinate entity that is used in various cases, but can also show how reality differs from this conception. With that, the next point will be discussed, which is that the cognitive unison theory can explain why the folk believe attention is a resource.

7.3. Explaining the belief that attention is a resource

As will now be explained, non-experts conceive of attention as a resource due to a phenomenological feature of their experience of attention. The feeling that people experience when they attend, that of concentrating their consciousness on things, comes in various levels of intensity. The intensity in the feeling seems to be something that is under the control of the agent experiencing it. In general, if more 'attention is paid' in an activity that is performed, the intensity of the feeling of concentration seems to increase. In general, if 'little attention is paid' the intensity of the feeling of concentration seems to be relatively insignificant, or feels to be less intense than it otherwise could. As this feeling of concentration is experienced by people when they attend, and it seems to vary in intensity in ways that are controlled by them when they attend, non-experts think of attention as something that they can put more or less of into activities. This brings them to the conclusion that attention is a resource. As has been made clear, attention is not a particular resource under the cognitive unison theory. However, it can help explain why it feels like one in this way, and so why non-experts believe it is one.

One of the major claims of the cognitive unison theory is that the background set of sub-personal processes that people bring to bear in unison whenever they attend often vary in

number, extent of activation, and so on.[227] This claim, as will now be demonstrated, allows proponents of the cognitive unison theory to explain the varying levels of intensity in felt concentration that people experience when they attend.

In general, intense feelings of concentration seem to be experienced by people in the kind of complex tasks that, under the cognitive unison theory, require many processes to be active and dedicated to the activity being performed (e.g. sitting an exam). In general, mild to negligible feelings of concentration seem to be experienced by people in the kind of simple tasks that, under the cognitive unison theory, require few processes to be active or dedicated to an activity being performed (e.g. listening to a radio in a quiet room). A proponent of the cognitive unison theory could explain the differences in the intensity of felt concentration in such tasks by asserting that the different amounts of sub-personal processes involved in the tasks, that the differing nature of the sub-personal processes used in them, and that the differing levels of activation in these sub-personal processes, are responsible for the differences in the intensity of the feeling of concentration in the tasks. What this means is that a supporter of the cognitive unison theory could argue that the feeling of concentration is generated by the kinds of sub-personal processes that are brought to bear when people attend in various acts and that, in general, this feeling is more intense when certain processes are used, when more of them are used, or when they reach a high level of activation.

The above shows how the cognitive unison theory can explain why the phenomenological feature of concentration often varies in intensity. This very feature is responsible for the folk believing that attention is a resource. As such, the cognitive unison theory can explain why the folk think that attention is a resource. In sum, it shows that the cognitive unison theory can explain why the feeling of concentration that non-experts experience when they attend comes in varying levels of intensity and thereby how non-

[227] Ibid, p. 83.

experts come to be acquainted with it as a kind of resource that they believe they can put more or less of into various mental acts. The cognitive unison theory also provides a more informative account of how the phenomenological feature of concentration can differ in intensity than the folk concept of attention does. How it does so will now be discussed.

The feeling of concentration people associate with attention does not vary in its intensity in one way only. It can feel more or less intense in at least three different ways. First, it can feel as if it is something that is more or less difficult to maintain. For example, sometimes when performing a difficult activity one's concentration feels like something that could lapse at any time. Second, it can feel as if it is drawn to something, or held by something, to a greater or lesser degree. An example of this is when an individual is consumed by obsessive thinking and feels as if they cannot draw their attention away from the activity. Finally, and most commonly, it can feel as if more or less concentration is involved in whatever activity is being performed at a given time. This kind of phenomenal intensity is the kind that covers most cases of attention, and it is the kind of intensity over which people generally have control. An example of this is when one notices something in the distance, and then one becomes interested in that thing, straining to see it, with the level of felt concentration increasing in a way that one seems to control. These three variants of intensity will be discussed in great detail in the fourth chapter. What is important for the purposes of this chapter is that the folk concept of attention is ill equipped to explain the distinction between these different kinds of intensity, whereas the cognitive unison theory can.

The folk psychological concept of attention is based on a single resource like scale. When it differs in the ways described above, non-experts describe the difference in felt intensity in terms of more or less attention being used. For example, a monotonous activity that does not involve a high degree of felt concentration, but in which concentration feels extremely difficult to maintain (marking papers, for instance) is something that folk would

describe as requiring 'all' of an individual's attention to continue performing. This is problematic, because the folk concept cannot distinguish between the different kinds of phenomenal intensity people experience when they use their attention. It cannot give a fully informative depiction of the experience people have of attention. This problem is overcome by the cognitive unison theory, which can explain why and how the different types of intensity in the feeling of concentration can arise.

Mole, when he gives an account of how attention can come in degrees, notes that:

> Different instances of cognitive unison can differ as to the size of the background set over which unison is displayed; they can differ as to the proportion of the background set that is actually active; the can differ as to the rate at which the active resources are performing; and they can differ as to the stability of the state of unison.[228]

It is through this explanation of the way different types of cognitive unison can differ in degree that the theory can explain the different kinds of phenomenal intensity that people experience when they use their attention. For example, it can explain why some activities that seem like they involve relatively little felt concentration feel extremely difficult to maintain concentration in. It can do this by reference to the lack of stability of the state of cognitive unison at that time. Or, to use another example, it can explain how people feel drawn to something or consumed by something in quite an intense way when they give an activity their attention, even if it is very simple. The theory can do so by reference to the high rate of activity in the resources performing in that activity. In essence, the cognitive unison theory is capable of giving diverse sub-personal accounts of the kinds of resources drawn together in unison whenever people attend, and then it is able to show the different ways in which these resources might manifest themselves at the personal level. As a result of these things, the

[228] Ibid.

cognitive unison theory is more informative than the folk concept is in its account of the phenomenal characteristics of attention. It has the capacity to explain the different kinds of phenomenal intensity that people experience when they use their attention, whereas the folk concept does not. With this, an account of how the cognitive unison theory can explain why the folk understand attention to be a limited resource will now be supplied.

7.4. Explaining the limits of attention

Part of the reason that non-experts hold that attention is a limited resource is the fact that it does often seem to be interrupted. For example, when an individual is using what they think of as their 'attention' in one activity, the concentration they have in this activity is often disrupted and is diverted to another activity. Non-experts explain this through the folk concept in terms of not having enough attention to perform both activities simultaneously. As was shown in detail earlier, the interruption of attention is explained by the cognitive unison theory in terms of the activities competing for available cognitive processes.[229] In this way it explains the underlying reason for attention being something that can be interrupted, and can so help explain why non-experts think that it is a limited resource, given that part of the reason they believe this is due to it occasionally being interrupted.

Another reason why non-experts believe that attention is limited resource is that it feels as if there is a maximum to the amount of attention that can be put into any activity that is performed. In other words, it feels as if one can only focus so much on the objects or contents of any given mental act. For example, no matter how much an individual might strain to see an object in the distance, no matter how much they might try, they can only focus or concentrate on it so much. This feeling can be explained by the cognitive unison theory. The theory can explain it through reference to the extent to which any cognitive process, or

[229] Ibid, pp. 74-82.

set of processes, can be active to aid in the performance of a task, and through reference to the size of the group of processes that can be brought to bear in the performance of that task.[230]

As was discussed in the previous section, proponents of the cognitive unison theory can argue that the sub-personal processes that people draw upon when they attend often manifest themselves as feelings of felt concentration at the personal level. In accordance with this position, they can also argue that as there are limits to the rate of activity in any given process, and limits to the set of processes which can be brought to bear, so too will there be a limit to the intensity of the feelings that the processes can create at the personal level. Obviously, identifying the exact way in which the processes will manifest themselves at the personal level is beyond the theory. Different processes may manifest themselves in terms of different experiential features in different ways, and to different degrees of intensity. The levels of activation of different processes are also likely to manifest themselves in different ways at the personal level. However, if a particular cognitive process has limits to its rate of activity and there is any relationship between this process and the feelings of concentration people have when they attend, then a proponent of the theory can argue that there should also be a cap on the intensity in the way that the process manifests itself at the personal level. This provides them the means to explain the maximum in the intensity of felt concentration in any given activity that is performed attentively, in terms of the group of processes that are brought to bear in unison working at their maximum rate of activity.[231]

As was demonstrated, the cognitive unison theory can explain the maximum of felt intensity in concentration that non-experts experience when they attend, and can explain the interruption of attention. These two features of attention are responsible for non-experts believing that attention is a limited resource. Given this, the theory can explain why non-

[230] Ibid, p. 83.

[231] Some of these processes may not manifest themselves at the personal level at all. This is of no concern, as all the theory needs to do to explain the maximum that people experience in the feeling of focus or concentration, is have those processes that do manifest themselves at the personal level vary in felt intensity at the personal level when they vary in their level of activation at the sub-personal level.

experts come to hold that attention is a limited resource, through an account of the underpinnings of the features of attention that give rise to this belief. As will now be made clear, the cognitive unison theory is also more informative than the folk psychological concept is in explaining how people experience attention as something that is limited.

The folk concept of attention is only capable of explaining the limits of attention in one way. Under the concept there is a resource, attention, and only so much of it can be used in any given activity. If this were to be consistent with the experience people have of attention, it would seem that they could allot a particular amount of attention to any activity that they are performing or divide this maximum amount of attention evenly between different activities. However, this is not quite right. People experience differences in the maximum in intensity of felt concentration between different activities (as well as differences in the types of intensity). For example, some activities, like concentrating closely on something in the distance, seem to involve a very high maximum in the intensity of felt concentration, much more so than for things like trying to imagine a scene (if the two kinds of concentration are even comparable). In this way, it feels as if people can give more of their attention to some activities than they can to others. This cannot be explained by the folk concept. It gives no account of people being able to give more attention to some activities than to others. Indeed, in both cases described in the example there is a different maximum in the felt concentration experienced in each activity, yet, under the folk concept, an individual performing either activity could be justifiably said to be giving either activity 'all of their attention' when they concentrate on it as much as the can. The cognitive unison theory can explain the distinction between cases such as these.

Proponents of the cognitive unison theory can explain cases where some activities performed attentively involve a higher possible degree of felt concentration than other such activities. They can do so by noting that there are differences in the way that the different

cognitive processes used in the activities manifest themselves at the personal level. Some processes, they can argue, may be intrinsically felt in a more intense way, some may have greater variations in the rate at which they can perform in assistance of the activity, some may be part of a set of processes that together culminate to a great degree of intensity of felt concentration, and so on. In essence, given that different cases of cognitive unison will comprise different sub-personal processes, a proponent of the theory can assert that some sub-personal processes will manifest themselves differently at the personal level than others. From this they can assert that this will result in the possibility of one case of unison feeling both more intense and qualitatively different than another case, when both are at their most intense level of felt concentration. Simply, one will comprise different sub-personal processes than will the other.

The above explanation of the experience of attention goes beyond the folk concept because it does not rely on attention being a single multi-purpose resource that can manifest itself in only one way at the personal level – something that does not accord with the experience that people have of the phenomenon. Instead, it gives a multi-faceted explanation that can explain the complex phenomenal characteristics of the experience people have of attention in various cases.

7.5. Explaining the division of attention

The cognitive unison theory can help explain why the folk conceive of attention in the way that they do, by its capacity to give an accurate account of how attention may be divided between activities. The division of attention is an important part of the folk concept. Non-experts have the belief that their attention can be divided between activities. This belief conforms to the experience they have of attention, in which they often experience the division of their attention between two activities, like when they watch the road while driving, while

simultaneously listening to the passenger of their car talk. As was mentioned earlier in the chapter, the cognitive unison can give an account of how attention can be divided between activities like this. Under the cognitive unison theory, if the processes in any given state of unison do not overlap substantively, two tasks can be performed attentively simultaneously.[232] In this way, the theory can account for the folk concept comfortably, as it provides an account of the underlying reasons for why attention is often divisible. In what follows, an informative account of how it explains the division of attention across cases will be provided.

The cognitive unison theory has three kinds of explanation of how attention can be divided between simultaneously performed activities. These occur in cases of what Mole calls 'easy divided attention', 'easy but unstable divided attention', and 'effortful divided attention'.[233] These types of division of attention are the ones people most commonly experience and probably give rise to the folk conception of attention as a divisible resource. In them, the activities performed vary from those in which the cognitive processes required to perform either do not overlap at all (easy),[234] overlap somewhat but not in a way that impedes the cognitive unison of the core processes of either task (easy but unstable),[235] or overlap significantly and so are performed with cognitive unison interchangeably below the level of the conscious awareness of an agent (effortful).[236]

One benefit that the cognitive unison theory has in explaining the types of division of attention is that it can give an account of how two extremely demanding activities can sometimes be performed with attention simultaneously and without felt difficulty, while two relatively undemanding activities can sometimes not be given attention simultaneously with any ease at all. The cognitive processes required to perform two difficult activities may not overlap, whereas the processes of two simple activities may overlap, so making it feel less

[232] Mole (2011, pp. 75-79).
[233] Ibid.
[234] Ibid, pp. 75-76
[235] Ibid, pp. 76-77.
[236] Ibid, pp. 77-79.

difficult to divide one's attention between the more difficult activities.[237] Explanations of scenarios like this are beyond the scope of the folk concept. It provides an account of attention as a single multi-purpose resource. This implies that it will feel easier to divide one's attention between the less demanding activities than between the difficult ones, given that they require 'less attention' than do more demanding activities. In this way, the cognitive unison theory can provide a more informative account of the experience people have of attention than the folk concept can. It can account for uncommon cases in which two demanding activities may both be performed attentively simultaneously with little difficulty, while two undemanding activities can only be performed attentively simultaneously with great difficulty. There is also another way that the theory is more informative than the folk concept concerning the divisibility of attention.

Under the folk concept, there is no clarification of what restrictions there are on the division of attention. As a limited resource, it is something that seems to be able to be divided between as many activities as is required until there is no more of the resource available to allocate. This can be seen in the ability to make intelligible and intuitively viable statements of the form 'I was dividing my attention between x and y', in which the variables can be filled in with any mental activity. Problematically, the experience people have of attention does not always seem to conform to this (although it does most of the time). There are many activities that people cannot seem to perform with attention simultaneously. For example, it seems impossible, or near impossible, to pay attention to a friend talking and to what is said on the television at the same time.

The cognitive unison theory gives an explanation of cases in which people cannot divide their attention between activities. When people cannot give their attention to two activities simultaneously, it occurs in activities that are very similar to each other. For

[237] Ibid, pp. 75-79.

example, people are unable to focus on listening to what two people are saying to them simultaneously. Or, they are not able to perform two different visual searches simultaneously. In such cases, the cognitive unison theory holds that the activities involved have a core set of cognitive processes that are basically identical.[238] In these cases, it is impossible for an agent to continue performing the activities simultaneously and switch their attention between them, as in cases of effortful attention. Instead, they must stop and start the activities in order to give attention to them by bringing the processes in them that constitute their attention into unison.[239]

One might stop here and say, 'wait, it is possible pay attention in two similar activities simultaneously. People can look at two things at once, or listen to two things at once, and so on'. The problem with this claim is identified by Mole. When people hold that they are performing two near identical activities simultaneously, what is actually happening is the conflation of two activities into one larger activity. It is not the performance of two different activities.[240] For example, imagine that you are told to focus on one red ball in one part of your peripheral vision and another red ball in a different part of your peripheral vision. In this case the activity is to focus on the two balls at once. It is not two activities. You can realise this because, when you do it, what guides your understanding in performing the activity is focusing on two balls at the same time, and not focusing on each individual ball simultaneously (which seems impossible).

It is easy to see why the folk concept formed in the way it did. Much of the time, people focus on the objects or contents of different mental acts simultaneously. For example, it is common to see academics listen to music while writing a document. To explain this behaviour to others and in others, and to understand how they can do this kind of thing themselves, the folk conceive of attention as something that is intrinsically divisible. As has

[238] Ibid, pp. 79-82.
[239] Ibid, p. 80.
[240] Ibid, p. 81.

been seen, the cognitive unison theory not only can show how this is so in these common cases, explaining why non-experts can come to the belief that attention is divisible, but it can also explain less common cases in which attention cannot be divided. Given this, it both explains why the folk conceive of attention in the way they do, given its capacity to explain a commonly experienced aspect of attention, and it can also provide an informative account of the experience people have of attention in uncommon cases. With this in hand, the cognitive unison theory will now be demonstrated to explain why another aspect of the folk concept is the way it is, which is that attention is something that focuses, or concentrates, our consciousness on the objects or contents of our mental acts.

7.6. Explaining what attention does

In the last chapter, the folk concept of attention was demonstrated to be a concept of attention as a phenomenon that focuses or concentrates our consciousness on the object, or the contents of our mental acts. This aspect of the folk concept is one that is seemingly immediately identifiable in experience. Broadly speaking, whenever we give our attention to an activity, we feel as if we are focussed on or are concentrating on what it is about. As a result, we seem to become more aware of what it is about, and that thing becomes a salient feature of our conscious experience at that time, with other things that our attention is not directed at fading into the background. Indeed, it seems that it was this feature of our experience of attention that caused James to state that 'focalisation, concentration of consciousness are its essence'.[241] In what follows this feature of experience will be shown to have a variety of characteristics in different cases in which it manifests itself, characteristics that the folk psychological concept cannot account for. It will then be shown that the cognitive unison theory can provide a comprehensive and informative account of this feature of experience when it manifests itself

[241] James (1890, pp. 403-404).

across relevant cases. The section will conclude with a description of how, as well as providing a more informative account of this aspect of experience than the folk concept, the cognitive unison theory is still capable of providing an explanation of why the folk conceive of this aspect of attention in a simple way.

Focusing on what it is that one is thinking about often feels radically different than focusing on what it is that one is looking at. For a start, in one case the energies used feel as if they are directed out to the world through a part of the body and in the other they do not. There are also phenomenal differences between what it is for the content of what one is thinking to be an occurrent feature of one's conscious experience and for an object one is looking at to be a central feature of one's experience. In the latter case, the thing will feel as if it is part of a surrounding background and is composed of mind-independent qualities, and in the other it will feel as if it is something that is created through an act. The nature of such differences will be discussed in detail in the chapter that follows, but the fact that there are phenomenal differences is something that is immediately accessible through introspection. What can be said now is that, in such cases, the feeling of focus or concentration and the corresponding prominence of the thing focussed or concentrated on are both different.[242]

There is no way for the folk concept of attention to give an informative distinction between the different kinds of focus or concentration described above. It is clear that these feelings share similarities, given that in such cases there is a feeling of locking on to something as part of what one is doing, something that becomes more prominent as a result. Moreover, it is clear that these similarities are the cause of the folk concept of attention being of something that focalises, or concentrates our consciousness on things. Indeed, it is through the folk concept that people pick out this similarity in order to explain to others what it is that they are doing. However, the folk concept is simply not equipped to explain the differences

[242] See Martin (1997, p. 78) for a detailed example of the phenomenal differences between focusing on thoughts and focusing on objects of visual perception.

between the feelings when they occur. The cognitive unison theory is equipped to do so. The cognitive unison theory gives a clear explanation of how focusing on the content or objects of different activities feels different. It also offers an account of how each kind of focus makes such contents or objects salient features of our conscious experience in different ways. How it does so will now be described.

A proponent of the cognitive unison theory can give an explanation of why different instantiations of focus can feel different by identifying that different cognitive processes collectively constitute cognitive unison in each case of attention and that these cognitive processes will manifest themselves differently at the personal level in each case. For example, attentively looking at something and attentively thinking something can again be compared. Under the cognitive unison theory, there are different combinations of cognitive processes involved in the cognitive unison that people bring to bear in these respective acts.[243] Given that there are different processes involved, a proponent of the cognitive unison theory can argue that these processes will manifest themselves differently at the personal level, thus creating a different phenomenology in each case. A variety of different examples could be used to show this point, from attention in auditory perception to attention in imagination. This is a strong point of the theory as there are many different ways in which the focus, or concentration people experience of attention manifests itself in conscious experience. In this way, the cognitive unison theory shows itself capable of providing an informative account of an aspect of the experience that people have of attention. It has a versatile capacity to explain the feeling of focus people experience when they attend. With this in hand, the second point will now be discussed.

The cognitive unison theory can explain why the objects or contents of different activities manifest themselves in different ways in experience when people focus on them.

[243] Mole (2011, p. 51).

Under the cognitive unison theory, cognitive processes are those processes that act on personal level representations in such a way that a subject may form personal level attitudes towards them (looking at them, thinking about them, etc.).[244] Such processes will act on personal level representations in different ways (be those visual representations, auditory representations, etc.). This means that, when a person attentively looks at something or attentively thinks about something, the differing cognitive processes they use to facilitate these acts will interact with the content of their personal level representations in different ways. Moreover, the personal level representations they act upon will themselves differ in nature. This makes it likely that the representational contents that the cognitive processes are directed upon through the person's mental acts will manifest themselves to their consciousness in different ways, given the different functions of the processes involved and the different characters of the representations themselves.

Given what has been said, whenever an individual gives their attention to looking at something, and whenever they give their attention to thinking something, and they wonder why it is that what they are looking at seems to 'pop out' from a surrounding background, and why the thought content seems to follow a train, the underlying cause can be explained by the cognitive unison theory. Using the theory, it can be argued that attention is sustained by different cognitive processes that act on different representational contents in different ways whenever an individual attentively thinks something or attentively looks at something. As such, when they focus on these things they come to experience what they are looking at or are thinking about in different ways – one as a mind-independent feature that pops out from a surrounding environment, and another that follows a train and is constituted by what they are doing at the time.

[244] Ibid, pp. 57-58.

From the aforementioned, it is clear that the cognitive unison theory can give an explanation of both how the feeling of focus and how the corresponding prominence of the thing focussed upon can differ across mental acts that are performed attentively. As a result, the cognitive unison theory is capable of giving an informative account of the experience of the 'focalisation and concentration of consciousness' that people experience when they attend.

The cognitive unison theory can also explain why non-experts understand the experiential feature of focus and concentration in simple terms, through the folk concept. Although there are differences between the feelings of focus and concentration across cases of attending, and differences between how the things focused on or concentrated on manifest themselves, there are also similarities. The folk concept identifies these similarities and accounts for them in a unified way. Doing so provides a simple communicative tool that the folk can use to indicate that they are attending at a given time and so are having an experience with certain features. The cognitive unison theory, in its capacity to explain the feelings in each instance, is not only capable of explaining the differences between the feelings, but also the similarities that they share. With this, it provides an account of the underlying causes of one of the common features of the experience people have of attention, a common feature that causes them to conceive of the phenomenon in a particular way. It therefore shows how people come to be acquainted with attention in the way that they are, and so why they understand it in the way that they do.

With this in hand, the final aspect of the folk concept that the cognitive unison theory can explain will now be discussed. This is the causal role that people attribute to attention in everyday psychological explanations – that of accessing and retaining information.

7.7. Explaining the role of attention in everyday psychological explanations

There are many cases in which people gain access to information concerning something at a given time by concentrating or focusing their consciousness on it. Cases like this are common. They range from noticing something in a visual scene, taking in information about a particular concept, noticing one aspect of what someone has said, thinking about where one put one's house keys or what the weather forecast is, and so on. In each of these cases, there is a particular kind of focus towards a kind of thing, and information concerning it is obtained as a result of this focus. Moreover, people's ability to gain access to information concerning these things by focusing their consciousness on them seems also to provide them with the capacity to remember that information later on. As an explanatory tool, the folk concept of attention is useful here. It picks out a single multi-purpose mental phenomenon that can explain how people have the capacity to focus on things in these varied cases. Ultimately, attention, as non-experts conceive of it, is a multi-purpose resource that allows them to focus their consciousness on things, so allowing them to access information concerning those things, so giving them the capacity to retain information about those things.

However, despite being useful, the folk concept does not give any indication of how attention, this multi-purpose resource, actually allows people to gain access to information about things by focusing their consciousness on them. Rather, it is a simple communicative tool that merely picks out whether or not an individual is focusing their consciousness on something at a given time and is accessing information about it as a result. This is something that can doubtless explain certain behaviour, such as whether or not somebody has access to information about something at a given time, or whether or not somebody has the capacity to retain that information as a result, but it cannot give any real account of how an individual actually accesses information concerning something when they focus their consciousness on it.

The cognitive unison theory can help to explain why non-experts have such a superficial conception of attention in this regard. It can be pointed out that non-experts do not have a coherent way to explain how it is that they gain access to information about things as a result of focusing their consciousness on them. The reason is that they have no awareness of the kinds of processes that they bring to bear in unison when they attend. Indeed, as was discussed earlier, non-experts have no way of knowing which parts of their brains they are utilising when they attend. So a proponent of the theory could argue that, given that the folk do not have any other means to explain what is allowing them to access information concerning the objects and contents of their mental acts when they focus their consciousness on them, they have developed a superficial account of a single multi-purpose mental phenomenon that performs this role across cases. Doing so, it could be argued, provides non-experts with a simple account of what it is that they are drawing on when they focus their consciousness on things in their widely varied mental acts, from thinking about things, to listening to them, to looking at them, and so on.

The above provides a good explanation of why non-experts conceive of attention in the way that they do as it supplements a simple reason why the folk concept is superficial. This simple reason is that, although the folk concept is uninformative concerning the way in which attention allows people to access information about things, it does not need to be informative in this regard. It is, at core, a communicative tool. The folk concept only needs to pick out a mental phenomenon that can explain, in everyday discourse, whether or not one is accessing information about something at a certain time by focusing their consciousness on it and whether or not one has the capacity to retain information about that thing as a result. The concept does not need to give any informative picture of how this occurs to provide such explanations. For an example, if an individual apologises for not being able to describe what somebody has said, because they were ‘not paying attention ’, this explanation does not rely

on the capacity of that individual to understand the exact nature of the means by which attention could have allowed them access to the relevant information in the first place. Proponents of the cognitive unison theory can supplement this position. They can identify that as well as the fact that the folk do not need to have an informative understanding concerning the way they access information through attending, they are completely unaware of how this occurs too, so they have developed a simple concept to explain how they do this.

With an explanation of why the folk have a superficial account of how attention allows people to access information concerning things through focusing on them, proponents of the cognitive unison theory can then give an informative account of how this occurs. Under the cognitive unison theory, in whatever activity that people are performing attentively, they bring to bear a variety of cognitive processes in unison in a way that is guided by their understanding of that activity.[245] This means that they bring to bear different sets of cognitive processes in unison, in different activities that they perform attentively. These processes will facilitate the kind of focus required to access the information that is relevant to these activities and not to others. For example, in activities that involve looking at things, people will bring processes like the binding process to bear, as well as a variety of others that help them access visual information.[246] These processes will be geared towards accessing visual information, and will underpin the kind of focus that people use to look at things. In other cases, people will bring other processes to bear such as those involved in allowing them access to auditory information or those that allow them access to their memories, or thoughts. These processes will underpin the kind of focus required to access the information relevant to these activities. In this way, the cognitive unison theory can explain how people actually come to access information through focusing their consciousness on things when they attend, describing how a variety of different cognitive processes perform this role, depending on the case in question.

[245] Ibid, p. 51.
[246] Treisman and Gelade (1980).

This is the final of six different aspects of the folk concept of attention that the cognitive unison theory can account for. In each of these aspects, the theory has been shown to be able to provide an account of why non-experts understand attention in the way that they do, given the manner in which they are acquainted with the phenomenon. It has also been shown to provide a more informative account of that same phenomenon, in line with empirical evidence. With this, it has been established as a theory with a strong claim to conceptual accuracy. Advocates of it can say that 'this is why we had that initial impression, and this is what is really going on' concerning attention, in a comprehensive and informative way. Interestingly, it has also shown itself to be more informative than the folk concept in accounting for the phenomenal experience that people have of attention. It does do in several ways, such as accounting for the limits of attention, and the divisibility, or lack thereof, of attention.[247] This is largely due to the fact that it provides a flexible framework that can be sensitive to the different ways in which attention can manifest itself in phenomenal experience. This is a boon for the theory, given that the account of the phenomenology of attention in the next chapter will show attention to be a phenomenon that can manifest a wide range of characteristics in phenomenal experience, depending on the circumstance.

8. The empirical answer

In this chapter the following three points were asserted, in chronological order:

(i) All of the competitors to the cognitive unison theory do not qualify as adequate interpretations of the metaphysics of attention because they are in conflict with existing empirical evidence,[248] have conceptual flaws,[249] or are inadequate in scope.[250]

[247] Being extremely complex and informative concerning experience would probably be damaging for the folk concept as a communicative tool. Part of its usefulness is its applicability across cases. If it is too complex, and is too sensitive to the vagaries of the experience people have of attention, it loses much of this applicability.
[248] Process theories of attention fall into this category. See Mole's argument, outlined in section 3.
[249] The adverbial theories of Bradley (1886) and Ryle (1949) fall into this category. See the arguments in section 4.

(ii) The cognitive unison theory has none of the flaws identified in (i) and has advantages over its major competitors, process theories of attention, due to its empirical accountability, and capacity to explain the experience people have of attention.[251]

(iii) The cognitive unison theory is conceptually accurate due capacity to explain why non-experts conceive of attention in the way that they do.[252]

The first two of these three points show that the cognitive unison theory is the best available theory of the metaphysics of attention. This is the case as they identify that its competitors are all inadequate in ways that it is not, and that it has advantages over them in its capacity to explain certain aspects of the empirical evidence and explain the experience people have of attention. Collectively, these three points show that the cognitive unison theory is a good theory of the metaphysics of attention. They identify it as being conceptually accurate, providing the best interpretation of people's experience of attention currently available, accounting well for the current empirical evidence, and managing to avoid the pitfalls that have beset competing theories. So, in this chapter, the cognitive unison theory has been demonstrated to be the best available theory of the metaphysics of attention and to be a good theory of the metaphysics of attention. As will now be explained, as a result of these two conclusions, the cognitive unison theory is the theory that provides the empirical answer to the question 'what is attention?'

At the outset of this thesis, the empirical answer to the question 'what is attention?' was argued to be best provided by a good theory of the metaphysics of attention. This is the case, as such an answer requires an account of what brain mechanisms, and processes, if any, give rise to attention in the way that people are acquainted with it, and a good theory of the

[250] White's (1961) theory and the personal level theories of Smithies (2011), Watzl (2011), and Wu (2011a, 2011b, and 2011c) fall into this category. See the arguments in section 4.3 and section 5.
[251] Section 6 provides the basis for this point.
[252] Section 7 provides the basis for this point, as well as the reasons that the conceptual accuracy of a theory of the metaphysics of attention is (at least in part) determined by its ability to explain why non-experts conceive of it in the way that they do.

metaphysics of attention provides this kind of account. It does so by providing a foundational account of the phenomenon that explains all other types of acquaintanceship that people have with it, and maintains accuracy to the world, through using the latest empirical evidence. As was noted in the previous paragraph, the cognitive unison theory provides such an account, and no other theories are better than it in this regard. Therefore, the account of attention that the cognitive unison theory provides is the best empirical answer to the question 'what is attention?' currently available, and so it supplies the second of the three answers to this question in this thesis.

Before the third and final answer to the question 'what is attention?' is provided, it is important to note that the cognitive unison theory is not perfect. It is quite possible that it could be replaced by a better theory in the future. It is possible that a theory of attention that can provide a better conceptual paradigm through which attention can be understood could be developed. Moreover, many of the claims made by the cognitive unison theory are empirical claims. If empirical evidence shows that attention might not be constituted by a set of cognitive processes operating in unison whenever people attend, then this would have to be taken into consideration. For example, if evidence shows that there is a particular brain mechanism, process, or network that constitutes attention in all cases, this would give support to a higher order process theory interpretation of attention. However, such a theory would need to follow through the rigorous set of requirements that this chapter has argued that the cognitive unison theory managed to fulfil. For example, in order to give a good account of the metaphysics of attention, it must give an explanation of why the varied aspects of the folk concept of attention are the way that they are. Ultimately, were a theory to provide a better conceptual framework through which attention can be understood than the cognitive unison theory, a framework that is more aligned with the latest empirical evidence, and that better explains the folk psychological concept of attention, the empirical answer to the question

‘what is attention?’ supplied here would have to be revised. As it stands, though, the cognitive unison theory provides the answer to this question.

Chapter 4: The Phenomenology of Attention

1. Introduction

Pain has phenomenal properties that have been well discussed.[253] So too does visual perception, auditory perception, and tactile perception.[254] Emotions have phenomenal characteristics that have received a good deal of discussion.[255] The idea that beliefs often don't have any phenomenal characteristics is a well-known point of philosophical analysis.[256] The phenomenology of thought has recently come into its own as a very interesting topic.[257] However, the phenomenology of attention itself has not received any substantive consideration in analytic philosophy. The dominant focus of any discussion about the relationship that attention has with phenomenal experience is on the effect that attention has on the phenomenal properties of perceptual states, visual perception in particular.[258] There is a gap in analytic philosophy where the phenomenology of attention itself is concerned.

Attention is one of the key mental players. It has a massive role in phenomenal experience, not just in terms of the effect it has on the phenomenology of different mental states, but in terms of the feeling that people attribute to it, itself. Indeed, it has already been demonstrated that this feeling is a constitutive part of the folk psychological concept of attention. It is also a major point of discussion in much psychological literature.[259] It is important that an account of the phenomenology of attention is developed, so that progress

[253] For examples, see Aydede (2001), Martinez (2011), and Tye (1995).
[254] There are many, many, examples that cover all three of these modalities. For a recent example concerned with vision see Averill (2012).
[255] For an in depth description of the phenomenal characteristics of emotions, see Prinz (2003, 2004), a philosopher who understands emotions in terms of their phenomenal characteristics.
[256] For a classic description of beliefs as states lacking phenomenal characteristics see Searle (1998).
[257] For conflicting analyses of the phenomenology of thoughts see Carruthers and Veillet (2011) and Nes (2012).
[258] For some examples among many, see Block, (1995), Chalmers (2004), Macpherson (2006), Nickel (2007), Peacocke (1993), and Tye (2010).
[259] This will be discussed in detail later in the chapter. For an example see Csikszentmihalyi and Nakamura (2010).

towards a complete picture of the varied aspects of phenomenal consciousness may be achieved. Developing such an account will be the focus of this chapter, and when an account of it is provided, so too will be the experiential answer to the question 'what is attention?' in this thesis.

To begin this chapter, the folk psychological concept of attention will be argued to provide the groundwork to develop an account of the phenomenology of attention. It will be argued to do so through identifying that the phenomenal property that people associate with attention, being the feeling of 'focus' or 'concentration', is isolated within the phenomenal features of certain mental acts. These mental acts are all those mental acts that people refer to as forms of 'attending', and exploring the phenomenal features of these acts to isolate and account for the feeling of focus or concentration will be the aim of the chapter.

Before the exploration of the phenomenal properties of different forms of attending is conducted, two important tasks will be carried out. First, mental acts will be shown to have phenomenal properties that are independent from the phenomenal properties of the mental states in which they feature, and to have phenomenal properties which differ from mental act to mental act. This point will be argued to demonstrate that mental acts, like those that people refer to as forms of 'attending', have a phenomenology that can be meaningfully explored. Second, a method will be developed in order to accurately identify the phenomenal property of focus or concentration from within different forms of attending. This method will be based upon testing different phenomenal properties that people experience when they attend against three criteria. Any phenomenal property that meets these criteria will be argued to be representative of the experience that people have of attention overall, and to be a property that may be identified with the feeling of focus or concentration that people attribute to attention. The criteria are as follows:

(i) The phenomenal property must be absent in a particular type of mental act when it cannot be referred to as a form of 'attending' and be present when it can.

(ii) The phenomenal property must be experienced in all mental acts when they can be intuitively referred to as forms of 'attending'

(iii) The phenomenal property must only be experienced in mental acts when they can be intuitively referred to as forms of 'attending'

The phenomenal properties that will be tested against these three criteria come under three broad phenomenal categories. They are: feelings of mental causation, feelings of authorship, and feelings of effort. The nature of these categories will be elaborated upon later in the chapter. For now, it will do to note that a feeling of directed mental effort, which resides where the categories of effort and authorship overlap, will be tentatively argued to satisfy the criteria, and to be the property that people attribute to attention in their experience and conceive of in terms of the feeling of 'focus' or 'concentration'.[260] As such, through a description of this phenomenal property, given that this phenomenal property is what people experience attention to be, the third and final answer to the question 'what is attention?' of this thesis will be provided. To conclude the chapter, an account of the complex ways that directed mental effort can manifest itself in phenomenal experience will be outlined.

2. Folk psychology and phenomenology

As has been discussed in both the second and third chapters, attention manifests itself in a certain way within phenomenal consciousness. This manifestation can be characterised in terms of a feeling of 'focusing or concentrating one's consciousness on things', or simply in terms of a feeling of 'focus' or 'concentration'. There are many examples of this feeling. To

[260] The reason the term 'tentative' is used here is that the conclusion that the property satisfies the criteria will be identified as a conclusion that is open to empirical refutation.

begin, when one attends to something visually one will feel the focus, or concentration involved in looking at the thing, to varying degrees of intensity. It is something that is often characterised in terms of 'strain', and can feel difficult, such as the feeling of keeping track of an object that is moving quickly. To use another example, when attending to a train of thought one will feel the concentration involved in maintaining that thought (i.e. the feeling of concentrating on complex philosophy). To use a final example, one can often feel that their focus or concentration being drawn toward stimuli, perhaps involuntarily. Cases of this occur in visual perception where some things are said to 'catch', or to 'grab' one's attention. An account of the phenomenology of attention should provide an informative explanation of what the feeling of focus or concentration is like, and so this will be done in this chapter. The folk psychological concept of attention will now be shown to provide the basis of this analysis, as it identifies where the phenomenal property of focus or concentration may be isolated within phenomenal experience.

The folk concept of attention, expounded in the second chapter, is a concept of a resource that is used both voluntarily and involuntarily in the mental acts of an agent. It is also a concept of a phenomenon that involves the feeling of focus, or concentration. These aspects of the folk psychological concept together provide the insight which will be at the basis of the exploration of the phenomenology of attention in this chapter. They identify that the feeling of focus or concentration that people experience when they use their attention can be isolated within the phenomenal features of mental acts. This is so given that the concept (i) identifies that attention is something used in mental acts, and (ii) identifies that attention, when used, involves feeling of focus or concentration. It will now be demonstrated that this folk intuition is accurate, and that the feeling of focus or concentration is something that may be isolated within the phenomenal features of certain mental acts. These mental acts are all

those mental acts that can be considered forms of 'attending', and exploring their phenomenal properties to identify and elaborate on the feeling will be the aim of this chapter.

When one looks at something, if one feels the focus involved in keeping track of it, one feels the focus as something that is involved in looking at that thing. When one thinks about something, if one feels any concentration, one feels it as something that is involved in thinking the thoughts. To use a final example, when one watches a speaker giving a talk, if one experiences any concentration or focus, one feels it as something that is involved in listening to the talk, looking at the speaker, and thinking about the content of the talk. This kind of result will apply in any example that can be developed. The feeling of focus or concentration, the feeling of 'focalising or concentrating' one's consciousness on things, will always and only be felt as something involved in the performance of some mental act.[261] In particular, all the mental acts in which involve this feature, like those just described, are all able to be characterised as forms of 'attending', or as mental acts in which attention is used. More than this, people intuitively characterise mental acts as forms of 'attending' only on the basis of those acts involving this feature. This is the case, as the feeling of focus, or concentration is representative of attention within experience, and so is the property which causes people to intuitively refer to some mental acts as forms of 'attending' and not others. To justify the claim that people only refer to certain acts as forms of 'attending' on the basis of involving this feeling, an example will now be provided.

Consider two examples of driving. In one instance, one focuses or concentrates their consciousness on the road, scanning it visually, in order to make sure that one's vehicle is appropriately placed to avoid any obstacles (pedestrians, other cars, etc.). In the other, one scans the road visually to make sure one's vehicle is appropriately placed to avoid any

[261] The effects of focussing or concentrating on something involve feelings that go outside of the experience of mental acts. These features have been broadly discussed in analytic philosophy. They involve effects on visual perception, like those discussed by Wayne Wu (2011), effects on thought like those discussed by M. G. F. Martin (1998), and effects on phenomenal consciousness generally, like those described by Sebastian Watzl (2011).

obstacles (pedestrians, other cars, etc.), but does not experience focus or concentration toward the road, and performs the activity in what Armstrong refers to as 'a state of automatism'.[262] There are phenomenal differences between these two mental acts. In the first one can identify a feeling of focus or concentration directed on to the road, whereas this feeling is absent in the second. Importantly, there do not seem to be any other differences between the two activities, and if there are, they are not immediately identifiable. People intuitively refer to the first of these two cases as a form of 'attending', whilst they do not refer to the second as a form of 'attending', as was identified when this driving example was used in the second chapter. Given this, and given that the only identifiable differences between the two activities is a particular phenomenal feature,[263] it can be concluded people refer to the first activity as a form of 'attending', or as a mental act in which attention is used, on the basis of it involving a feeling of focus or concentration. Other examples can provide the same point, such as a comparison between thinking in a focussed manner compared to mind-wandering. Ultimately, a mental act seems only to be able to be considered a form of 'attending', or, in other words, as a mental act in which attention is used, if it involves the feeling of focus or concentration at a given time.[264]

Given the above, an analysis of the phenomenology of the mental acts that can be considered forms of 'attending' needs to be carried out, as it is within these mental acts that attention manifests itself in experience. This will be done in what follows. The folk psychological understanding that people have of attention will be of use in this analysis, as it acts as an intuitive guide to which mental acts can be considered to be forms of attending at a

[262]Armstrong (1968, p. 93).

[263] This is not to say that there are other phenomenal differences between the two cases in conscious experience generally. It is only to say that the phenomenal differences between the mental acts are constituted by focus, or concentration being experienced in one and not the other.

[264] One might query this position. They could do so by noting that whilst the involvement of focus or concentration in a mental act constitutes whether or not it can be considered a form of 'attending', this does not mean the feeling of focus or concentration constitutes whether or not a given mental act can be considered a form of 'attending'. This kind of response will be assessed later on in the chapter in section 6, when it is argued this kind of focus, or concentration should be understood in terms of a feeling, and not as anything else.

given time. This is the case, as people draw upon their folk psychological understanding of attention when they communicate with each other in everyday discourse. When they do, they intuitively describe certain mental acts as forms of 'attending', and not others, on the basis of those acts involving or not involving the feeling of focus or concentration that is representative of attention within phenomenal consciousness. This was seen in the example in the previous paragraph, where it was intuitively viable to refer to one of the mental acts as a form of 'attending' and not the other, on the basis of this feeling. So, in what follows, if it is intuitively viable to describe a given mental act as a form of 'attending' in a certain context, then that mental act will be taken to be a form of attending in that context, and to involve the phenomenal property of interest. Conversely, if it is not intuitively viable to refer to a mental act as a form of 'attending', it will not be taken to be form of attending, and will not be taken to involve the phenomenal property of interest. In this way, the folk psychological understanding of attention is an important tool in guiding the account of the phenomenology of attention provided in this chapter.

Before the analysis that follows is undertaken, mental acts will first be argued to have phenomenal properties that are independent from the phenomenal properties of the states in which they feature. This argument is necessary for the analysis provided in this chapter to proceed, as without it, the claim made here that the feeling of focus or concentration is isolated within the phenomenal features of mental acts is not justified. Then, a method through which to explore the phenomenology of different mental acts that can be characterised as forms of 'attending' will be developed, so that the phenomenal property of focus or concentration may be clearly identified, without conflating it with the other phenomenal features these acts may have, depending on the context.

3. Mental acts and their phenomenal properties

Discussion concerning the phenomenology of mental acts has recently become common in analytic philosophy. It has been described by Christopher Peacocke, who refers to it as an 'active phenomenology'[265], and Brian O'Shaughnessy gives an account of it in terms of 'the will'.[266] Others like Tim Bayne and Neil Levy talk of acts, including mental acts, often involving 'a phenomenology of doing'.[267] However, there does not seem to be, as yet, a substantive body of discussion concerning whether or not mental acts have phenomenal characteristics that are independent from those of the mental states which they interact with.[268] This seems to be a difficult thing to determine. For example, it is difficult to ascertain, without significant introspection, whether the phenomenal characteristics of looking at an object are exhausted by what is represented to an individual visually when they look at it, or if there are other phenomenal features involved in the act of looking itself which are independent from this. As will now be explained, an argument that mental acts do have phenomenal properties that are independent from the mental states with which they interact is required in this chapter. Then, just such an argument will be provided, based on a recent example provided by the philosopher Thomas Crowther.

In the previous section it was asserted that the feeling of focus or concentration that people attribute to attention is isolated within the phenomenal features of certain mental acts. This cannot be accepted if (i) mental acts do not have phenomenal features of their own, but rather just affect the phenomenal features of mental states, or (ii) all mental acts, some of which are not described as involving focus or concentration, share the same phenomenal properties. So, an argument that demonstrates that mental acts actually possess independent phenomenal properties, and possess phenomenal properties that differ across cases, needs to

[265] See Peacocke (2008, p.255).
[266] See O'Shaughnessy (2000).
[267] See Bayne (2008), Bayne and Levy (2006), and Pacherie (2008).
[268] This is not to say that a position on this issue is not assumed by those who discuss the phenomenology of mental states, or mental acts. Crowther (2010) seems to provide the most informative insights on the issue currently available.

be developed in order to justify the claims made in the previous section. In a recent paper, Crowther provides the means to make such an argument. In this paper Crowther claims that the phenomenology of perceptual experience is, in part, determined by 'agential factors', like looking at an object, or listening to one.[269] To do this he gives a series of examples. One of these examples, which will allow the argument that is required here to be made, is the following:

> There is a difference between what it's like for the agent who watches the bird cartwheeling in the sky with an epistemic aim and for the agent who merely watches the bird throughout that time for its own sake. What constitutes success in these different processes is different; in the second case, success consists in nothing more than that he maintains sight of the bird throughout that time, though in the former case, what constitutes success is that he is in a position in which he possesses perceptual knowledge of what it is that the bird is doing throughout that time. It is not clear though how these phenomenological differences are to be accounted for in terms of differences in what is seen, or in terms of differences in how what is seen is represented as being. The case in which the agent watches the bird for its own sake may involve just the same bird represented in just the same ways throughout the relevant period of time.[270]

In Crowther's example both scenarios are exactly the same in terms of what is presented to the subject. In both cases the agent will follow the path of the bird, and that bird will feel as if it is a salient feature of the environment to the agent. Indeed, in terms of the phenomenal features of the visual experiences that the agents have, and the way the acts effect these features, these scenarios are identical. The only real differences in either case are found in the features of the mental acts themselves. As such, the only plausible conclusion is that

[269] Crowther (2010)
[270] Ibid, pp.223-224.

features of the acts involved must be responsible for the phenomenal difference between the cases. This shows two things. First, mental acts must have some phenomenal characteristics that are independent from the mental states they interact with, as the phenomenal properties were localised in features of the acts, and not in any part of what was represented to the subject visually. Second, mental acts must be able to possess different phenomenal properties from each other, as the only thing that can account for the phenomenal differences between the two scenarios is a difference in the phenomenal properties that the acts possess. With this, mental acts, in this case two kinds of looking at something, have been shown to possess distinct phenomenal properties. This means that attention can have distinct phenomenal properties, given that it is something people experience using in mental acts. With this in hand, an explanation of how the phenomenology of attention will be extrapolated from within the mental acts in which it features – that is, all mental acts that can be characterised as forms of 'attending' – will now be provided.

4. The method

It has just been argued that mental acts have independent phenomenal properties, and that these properties often differ from mental act to mental act. It has also been argued that the feeling that is representative of attention within phenomenal experience, that of focus or concentration, may be isolated within the phenomenal features of all those mental acts that can be characterised as forms of 'attending' at a given time. Given these two things, it is possible to account for the phenomenal feature of focus or concentration through the study of the phenomenal properties involved in different forms of attending, and so this will be done in this chapter. This study will not be superficial. People experience the feeling focus or concentration in their everyday lives, but most are not aware of it in a detailed or structured way. The analysis provided in the following will be one in which the nature of this feeling is

made quite clear, and is differentiated from other feelings that people may experience when they attend. In order to do this, phenomenal properties that people experience when they perform mental acts will be tested against three criteria. These criteria will help identify the phenomenal property that is representative of the experience people have of attention overall, which people describe in terms of 'focus' or 'concentration'. The criteria, and how they can help identify this property, will now be described.

The first criterion is that a phenomenal property must be able to be experienced in a mental act when it can be referred to as a form of 'attending' and must absent when it cannot. This criterion if satisfied, allows the phenomenal properties that attention is causally responsible for to be identified. This is so, as, if a mental act exhibits a particular phenomenal property when it can be considered a form of 'attending' and does not exhibit that property when it cannot be considered a form of 'attending', then, given that the only change in the activity is the involvement of attention in it in one instance and not the other, attention may be considered causally responsible for generating the property. An example of how to identify a phenomenal property that satisfies this criterion would be to give an analysis of the phenomenal characteristics of attending to the content of one's thoughts carefully with some purpose in mind (perhaps understanding a mathematical problem), and then an analysis of wandering aimlessly in thought. In this case, if there is a phenomenal difference between the two forms of thinking, then attention is causally responsible for generating the property, given it is the only discernible difference between the two cases.

The second criterion for a phenomenal property to be considered representative of the experience people have of attention is that it must be experienced in all mental acts when they can be intuitively referred to as forms of 'attending'. The satisfaction of this criterion is important, as a phenomenal property that satisfies it will be one that people necessarily experience, whenever attention manifests itself in phenomenal consciousness.

The final criterion is that the phenomenal property must only be experienced in mental acts when they can be intuitively referred to as forms of 'attending'. The satisfaction of this criterion makes sure that a tested phenomenal property is one that people only experience when attention manifests itself in phenomenal consciousness, and do not experience at other times. This criterion helps rules out phenomenal properties that, whilst experienced by people when they attend, perhaps even necessarily, are also experienced in instances where people do not attend, and so are not representative of attention within experience.

If a phenomenal property satisfies all three criteria just described, it will be shown to be (i) caused by attention, (ii) necessarily experienced when attention has manifested itself in phenomenal consciousness, and (iii) is unique to cases where attention has manifested itself in phenomenal consciousness. With this in hand, through the satisfaction of these criteria, a phenomenal property will be able to be identified as representative of the experience that people have of attention overall. Moreover, if this phenomenal property is also able to be characterised as identical with the feeling of focus or concentration, it will be sufficient for people to have an experience of attention too. This is the case, given that it will be identified as identical with the property of focus or concentration that people take to represent the involvement of attention within mental acts, and causes them to refer to such acts as forms of 'attending' in the first place. In the following, just such a property will be identified.

Three phenomenal properties discussed in literature relating to the phenomenology of agency will be tested against the criteria just described.[271] They are a feeling of mental causation, a feeling of authorship, and a feeling of effort.[272] These are three phenomenal properties that actions, including mental acts, may possess. They are extremely broad feelings that cover most of the felt properties that are manifested by mental acts when they are

[271] For articles which describe the phenomenology of agency, and give an account of the broader literature see Bayne (2008), Bayne and Levy (2006), Pacherie (2007, 2008), and Preston and Wegner (2009).
[272] The three broad phenomenal features that will be assessed in this chapter are those outlined by Bayne and Levy (2006) in their book chapter 'The Feeling of Doing: Deconstructing the Phenomenology of Agency'.

performed, and all are often experienced by people when they attend. By looking at such broad properties, identifying the range of phenomenal properties that fit within them, and seeing if these properties satisfy the criteria developed here, the feeling of focus or concentration that is representative of attention within experience will be identified. This feeling will be shown to exist at the point where two of the phenomenal characteristics overlap, in the feeling of authorship, and the feeling of effort. It will be found to be a feeling of one's mental energies, or mental effort, being directed to something else with phenomenal properties. With this in hand, it will now be demonstrated that the feeling of mental causation, broadly construed, fails to satisfy the second criterion as it is not necessarily experienced when people attend.

5. Mental Causation

One phenomenal property that has been argued to be possessed by mental acts, and physical acts, is that people often experience them as things that are caused by their intentions.[273] For example, if an individual rides a bike to some location, it can feel, to them, as if their intention to ride to that location is the cause of their ongoing actions. To use an example involving a mental act, if an individual at a restaurant is deliberating over what items to order from a menu, it can feel, to them, as if their intention to order their dinner is the cause of their deliberating. It is tempting to argue that in both of these cases it is not any phenomenal quality that is experienced by the agents in question, it is just that their intentions actually do cause their actions, and that although they are aware of this, it does not register as part of their phenomenal experience. Given this possibility, it will now be quickly shown that it is justifiable to hold that this phenomenal characteristic exists, before it is argued to be one that is not attributable to attention.

[273] See Frith (2002), Marcel (2003), Searle (1983), and Wegner (2002), for an analysis of the extent, and nature of, this feeling.

Think of a case where you kick a football in order to pass it to somebody, and another case which is in all respects identical, except that you angrily kick the football at somebody in order to hit them with it. In both cases, it will feel different for you to perform the action. Yet, the only difference that can be identified in either case is the intention behind the action. This gives a good reason to claim that certain actions often possess the phenomenal property of feeling as if they are caused by intentions, given that this is the only phenomenal property that can adequately explain the phenomenal difference in the scenario described. With this in hand, this phenomenal property will now be demonstrated to be not attributable to attention, through the application of the methodology described in the previous section.

As has been seen, one criterion that needs to be satisfied, in order for a phenomenal property to be attributed to attention, is that the phenomenal property needs to be experienced in mental acts when they can be referred to as forms of 'attending'. People often refer to certain mental acts performed involuntarily as forms of 'attending', such as 'attending' to a sudden flash of light, 'attending' to a loud sound, or obsessively 'attending' to negative trains of thought. These cases do not seem to exhibit the phenomenal property of feeling as if they are caused by the intentions of the agent who performs them. They seem to be involuntary actions in which no intention plays a role. As a result of this, the phenomenal property of mental causation does not seem to satisfy the criterion just described, as there are instances where mental acts that can be referred to as forms of 'attending' do not involve this phenomenal property.

One could criticise the above position and say that all forms of involuntarily attending to things involve an 'intention in action' and that this intention not only is but feels as if it is, a constitutive part of such actions that guides people in their performance. In doing so, they could draw upon the position of the philosopher John Searle, who holds that the phenomenal properties of all acts, if these acts are experienced at all, are at least partially constituted by

the contents of an 'intention in action'.[274] Determining whether involuntary actions actually do involve an 'intention in action' is not of concern here. What is of concern here is whether the feeling of mental causation, the feeling that one's intentions are the cause of one's actions, exists in cases of involuntarily attending to things. As will now be argued, such a feeling cannot be argued to exist in cases of involuntarily attending to things, and so this property fails to satisfy the second criterion. It cannot be held as something that is experienced in all mental acts when they can be referred to as forms of 'attending', and so is not representative of the experience that people have of attention.

When people involuntarily attend to something, they often experience a feeling of agency. That is, when people involuntarily attend, they will often feel as if they are looking at something, thinking about something, and so on.[275] For example, when an individual involuntarily attends to a negative train of thought and is described as 'ruminating', they may be cognisant that they are thinking certain things at that time. Those who support a Searlean 'intention in action' view of the phenomenology of acts could argue that the feeling of agency that can manifest itself when people involuntarily attend to things, like the feeling described in the example, is a feeling of mental causation. In other words, they could characterise the feeling of agency that people often experience when they involuntarily attend to things as a feeling of being guided in the performance of an action by an intention to look at something, or think about something, and so on. This interpretation of the feeling of agency is problematic, and will not be endorsed here. It is perfectly fine to say that often when an individual involuntarily attends to something, they aware of and thus feel that they are performing certain mental actions. However, it is not justified to say that this feeling is that of their intentions causing these actions or guiding them in these actions.

[274] Searle (1983, pp. 91-92).
[275] The activity awareness may not be so specific in some cases of involuntarily attending to things. The agent in question may just be aware that they are doing something when they involuntarily attend.

People refer to instances of involuntarily attending to things as ‘involuntary’ mental actions for a reason. People describe these actions as ‘involuntary’, because they feel like they mental actions which they did not intend to perform. Indeed, if people felt as if they were being guided by their intentions in such activities, they would not use this moniker. For example of how an intention does not feel as if it is part of this kind of action, consider perceptually attending to something involuntarily, like a bright flash of light, or a crashing sound. This kind of attention feels as if it is a reaction to stimulus, and is one that, at least initially, does not involve any feelings of mental causation. Or, to use another example, if one is obsessively attending to a negative train of thought, it feels as if even if one tries to stop this form of attending one cannot, and that it is something occurring *beyond one’s control.* Given this, the phenomenal property of mental causation cannot be argued to be experienced in all mental acts that can be referred to as forms of ‘attending’, as it is not experienced by people when they can be said to ‘involuntarily attend’ to things.

To conclude, it is perfectly possible that an account of the metaphysics of the different forms of attending, even one that describes involuntarily attending to things, could hold that an intention is a constitutive component of all forms of attending. However, some forms of attending feel involuntary in phenomenal experience. As such, it is not justified to argue that the feeling of mental causation is common to all mental acts when they can be referred to as forms of ‘attending’, and so the phenomenal property of mental causation fails to satisfy one of the three criteria developed in this chapter. Given this, this phenomenal property will not be attributed to attention, as it is not an essential aspect of the experience people have of attention. The next phenomenal property, the feeling of authorship, will now be assessed against the three criteria that have been developed here.

6. Authorship

There is often a feeling that accompanies our acts when we perform them. It is a feeling that we are the ones performing them.[276] It can often be a complex feeling of performing a particular kind of activity with particular characteristics. For example, if you reflect on the nature of the activity you are performing right now – reading this text – you will experience that you are now reading, a mental act which involves following the text with your eyes, and thinking about what it means. However, it can also just be a very basic feeling of doing something. In these cases you do not need to believe or judge that you are doing anything in particular, but just need to experience a feeling of being the source of whatever goings on that are currently occurring, in some way. For example, often when one is jogging and is zoned out, one might feel that one is performing an activity, that is one might feel that they are doing something at that time, but might not be aware of the exact nature of the activity being performed. Or, to use another example, if an individual involuntarily attends to a sudden flash of light, when they do it, they might not be aware that the activity being performed is a form of looking, but could just feel, and thus be aware, that they are now doing something.

The feeling just described, in both of its basic and complex manifestations, is generally referred to as a feeling of authorship.[277] Many mental acts, and physical acts, often possess this phenomenal property. In what follows, an attempt by Sebastian Watzl to describe a particular kind of feeling of authorship that is attributable to attention will be assessed. It will be argued to be unsuccessful. Nonetheless, it will be found to touch on an important insight. There is a kind of phenomenal property that is attributable to attention, and it can be partially characterised in terms of a feeling of authorship. After the assessment of Watzl's account of the phenomenology of attention, this phenomenal property will be identified. It

[276] See Cambell (1999), Frith (1999), Horgan, et al. (2003), O'Connor (1995), Wegner (2002, 2003, 2005), Wegner and Sparrow (2004), and Wegner and Wheatley (1999), for an analysis of this feeling and its possible neural underpinnings.
[277] See Bayne (2006), Bayne and Levy (2006), Nahmias (2005), and Wegner (2002, 2003, 2005).

will be argued to be a particular kind of felt mental effort, a phenomenal property that is itself a feeling of authorship.

Sebastian Watzl gives an account of the phenomenology of attention, through a view he calls 'reflexive relationism'[278]. It is as follows:

> (REFLEXIVE RELATIONISM) The phenomenology of focusing your attention on something in part consists in being reflexively aware of you yourself attending to it.[279]

Watzl argues that the idea that attention involves a form of reflexive awareness is independently motivated, pointing out that the classic work of the experimental psychologist Gustav Fechner supports his claims.[280] For Watzl, the phenomenology of attention has two distinct components. He argues that in attending to something, you have awareness of what you are attending to, and an awareness that you are attending to it.[281] Watzl's reflexive account of the phenomenology of attention is similar to that provided by others, such as Wayne Wu,[282] yet his extends beyond sensory experience. One aspect of this awareness he describes is that it is an awareness of performing a specific activity - attending.

The kind of action awareness that Watzl argues people experience when they attend is a type of action awareness that involves many of the features that Christopher Peacocke describes in his general account of action awareness.[283] Watzl paints an interesting picture of the phenomenology of attention. Importantly, Watzl's account, if endorsed, satisfies the three criteria that have been established here, in order to identify the phenomenal property that is representative of the experience people have of attention. First, the phenomenal property he

[278] Watzl (2011, p. 153) also suggests this position in a recent book chapter. However, his claims are not as detailed in that chapter, so his PhD will be used as the primary source here.
[279] Watzl (2010 p. 69).
[280] Fechner (1889).
[281] Watzl (2010, p. 69).
[282] Wu (2011).
[283] See Peacocke (2007, pp. 358-376), and (2009, pp. 192-214).

describes would be identified in analysis of an act when it can be referred to as a form of 'attending', and would be absent when it cannot, so satisfying the first criterion. This is so, as the activity awareness he describes is specifically an awareness of attending, and so could be present in the experience people have of an act when it can be considered a form of attending, and absent from this experience when it cannot. Second, if people are necessarily aware of their own attending whenever they attend to something, as Watzl claims, this awareness will be a phenomenal quality that is experienced in all activities when they can be referred to as forms of 'attending', so satisfying the second criterion. Third, the kind of activity awareness Watzl argues for would be peculiar to all mental acts that when they can be referred to as forms of 'attending', so satisfying the final criterion. This is the case, as this activity awareness, as Watzl conceives of it, is an awareness of the authorship of particular kind of act, that would not be experienced when acts that are not of this kind are performed. The reason why Watzl's account will not be endorsed here will now be supplied.

Watzl is correct when he argues that people are aware that they are attending to something, when they attend.[284] For example, if you look at an object in your vicinity, right now, you will likely recognise that the activity you are performing is a form of attending. The problem here there is no activity awareness of attending, even in cases like this one. When people experience activity awareness it is not awareness of attending, but is an awareness of the nature of that mental activity more broadly. This point will now made clear through an analysis of three different examples of attending.

First, when riding a bike through a city, it seems as if one can be aware of looking at the traffic around oneself, and acting in a certain way according to the positioning of it. Second, if one listens to music at a concert, one can often be aware that one is listening to it. Third, when one thinks about a certain subject matter, one can often be aware that one is

[284] Watzl (2010 p. 69).

thinking about it. There is no kind activity awareness that each of these activities share. Rather, there is an awareness of an activity specific to each of these cases, that of looking, listening, and thinking respectively. Ultimately, the activities described here may share phenomenal features, but people, when they perform them, are aware of them as different mental acts. All three of these acts could be characterised as forms of 'attending'. As a result, the activity awareness described by Watzl is not shared by all forms of mental acts when they can be referred to as forms of 'attending', given that the three mental acts just described do not involve any activity awareness of attending, yet may be referred to as forms of 'attending'. So, the phenomenal property Watzl argues for cannot meet the second criterion developed in this chapter and cannot be held as representative of the experience that people have of attention.

Despite what has just been argued, Watzl raises an important point about the phenomenology of attention. People are aware of something particular when they attend. They do not refer to mental acts as forms of 'attending' arbitrarily. This was identified earlier in the chapter, when it was demonstrated that people only intuitively refer to certain mental acts as forms of 'attending', that is, as mental acts in which attention is used, if they feel themselves focussing, or concentrating on something when they perform them. So, Watzl is correct that the feeling of authorship is a constitutive element of the phenomenology of attention. However, as seen from the above, the feeling of authorship involved in attending is not to be understood as a general form of activity awareness as Watzl claims. Rather, it is to be understood as an awareness of oneself focusing or concentrating on something whenever one attends. The task in the following is to informatively identify what the phenomenal feature of focus or concentration should be considered to involve, apart from it being something that people feel authorship over, by testing phenomenal properties against the criteria developed here. Prior to this though, it is necessary to reply to a strong objection to

the idea that people are aware of focusing or concentrating on something whenever they attend.

It might be argued that although people focus or concentrate on things whenever they attend they are often not aware that they are doing this. This argument could be based on the idea that when people are said to be 'attending', and are focusing or concentrating on something, having an awareness that they are now focusing or concentrating on that thing might distract them from the task and impede them in their performance of it. For example, a professional cyclist, who focuses or concentrates intensely on the road while in a race, may be argued to find having self awareness that they are focusing or concentrating on the road a dangerous distraction that prevents total immersion in the task. This critique is a strong one, and it does raise an important point. The cyclist having a strong introspective form of awareness of his/her own focus or concentration on the road (that is, by thinking about it, or by judging that he/she is now experiencing focus or concentration directed toward the road) would impede his/her capacity to attend to the road effectively. However, as will now be demonstrated, focus or concentration is still experienced in these cases, and in all cases of attending, and so it is still something that people are aware of whenever they attend. This awareness is simply not a strong introspective awareness, but rather has some of the features of the basic kind of self-awareness that Watzl argues for.[285]

The visual activity of looking at the road involved in driving, when it is considered a form of 'attending', shares many features with the visual activity of looking at the road involved in driving when it is not considered a form of 'attending'. In both instances, people look at the road, identify where the traffic and other obstacles are located, and then situate their vehicle accordingly as a result of it. Indeed, in terms of all of the aspects of these activities that fall outside of phenomenally conscious experience, they can be considered to be

[285] See Watzl (2010, p. 71-74).

practically identical. These activities are differentiated by people on the basis of one involving a kind of focus or concentration directed at the road and not the other. This is not the kind of focus or concentration that can be described in non-phenomenal terms, like focusing pressure on a particular point physically. If it were, then the activities would not be able to be effectively differentiated from each other, as both activities involve a kind of focussing or concentrating of one's eyes on the traffic in a non-phenomenal sense. For example, it is not as if the person who is said to be 'not attending to the road' has eyes that are glazed over and are out of focus when they are driving. They have a non-phenomenal kind of focus on the road, as without it they would not be able to perform the activity and would crash the car. Ultimately, the kind of focus that differentiates the activity that is a form of 'attending' from the one that is not, is the kind of focus or concentration people associate with attention, the 'focalisation, or concentration of their consciousness'. It is a phenomenal feature, and so is a feature that people are aware of.

The above does not mean that people are aware of the features of focus or concentration in a strong sense when they attend. They do not have to believe that the phenomenal feature that they are experiencing is one of focus or concentration to experience this feature. Nor do they have to judge that they are now feeling focus or concentration, to feel focus or concentration.[286] They do not have to have any concept of what the feeling of focus or concentration is to be aware of it either. It just has to be part of their phenomenally conscious experience for them to be aware of it. As it is constitutively a feeling of that is a part of what they are doing, a feeling of their own focus or concentration directed toward something, it is also, in part, a feeling of authorship. The task now is to identify what this feeling of focus or concentration is comprised of, other than involving a feeling of authorship. This task will be carried out in what follows, where the phenomenal property that satisfies the

[286] These features of the self awareness of attention are described by Watzl (2010, p. 2010).

criteria developed in this chapter will be identified as a variant of felt mental effort, a kind of feeling which is itself, in part, a feeling of authorship.

7. Effort

Most broadly conceived, the feeling of effort is the feeling of one's energies, whatever they are, being brought to bear in some manner. It is not to be confused with the actual expenditure of effort, or, in other words, the actual use of energy. This often does not manifest itself as a feeling at all, as when one puts effort into casually riding a bike, but does not feel it in performing the activity. Rather, it is the feeling of one's energies, or effort, being used in some manner at a given time. It comes in a few general forms.[287] First, there is a feeling of physical exertion, like the feeling people experience when they carry a heavy object.[288] Second, there is a feeling of mental effort, like the feeling that can accompany thinking about complicated philosophy, or attempting to make a decision.[289] Third, there is a feeling of effort which occurs in preventing action, like the feeling involved in trying to prevent oneself from eating too many delicious treats.[290] In all of the three categories just described, there are many sub-categories, with different kinds of feelings of mental or physical investment. The object of discussion here will be mental effort. It is within this category that a phenomenal property that is attributable to attention will be identified.

Prior to discussing the feeling of effort as it relates to attention, it is good to note that any feeling of effort involves a feeling of authorship. It is a feeling that constitutively involves an awareness of the investment of one's own mental or physical resources in something. One may disagree here, and say that the feeling of effort is non-conceptual, and

[287] These three forms of effort are outlined in detail by the psychologists Jesse Preston, and Daniel Wegner (2009, pp. 570-573) in their piece 'Elbow Grease: When Action Feels Like Work'.
[288] For psychological analysis of this feeling see Gandevia (1987), Gearheart et al. (2005) Jeannerod (1997), and Nussbaum and Lang (2005).
[289] For psychological analysis of this feeling see Jacoby and Dallas (1981), Kahneman (1973), and Schwarz et al. (1991).
[290] For psychological analysis of this feeling see Baumeister, et al. (1994), Metcalfe and Mischel (1999), and Wegner (1989).

does not necessarily involve any particular kind of self-awareness of something. It can be recognised that it might be a non-conceptual phenomenal feeling, as all the phenomenal properties of experience might be.[291] The point is that it is a feeling of something coming from us when we experience it. We may not be aware of what it is associated with, like when we are jogging, but are zoned out and are not aware of our running, yet still feel the strain of the activity in our legs. Yet, we always still feel, and are thus aware of, effort as something that comes from us despite lacking a more sophisticated awareness of the activity that it originates from.

Some empirical support for the claim that the feeling of effort constitutively involves a kind of self-awareness of one's actions, or a feeling of authorship, is found in studies of people with schizophrenia. Schizophrenia, a complex disorder, often involves abnormalities in the self-awareness that sufferers have of their own physical and mental acts.[292] This often leads to delusions, such as the delusion that aliens are inserting thoughts into their minds.[293] Interestingly, empirical analysis of people with schizophrenia also shows that they often experience abnormalities in their experience of effort when they engage in some activities.[294] There seems to be a correlation between the feelings of effort and self-awareness, given that people with schizophrenia seem to exhibit abnormalities in both when they engage in activities.[295] This gives some reason to think that the two are related phenomena. As there is already good reason to consider them to be intrinsically related, given that the concept of felt effort seems to pick out the feeling of one's own energies being used, the position that will be taken here is that the feeling of effort necessarily involves a feeling of authorship. As such,

[291] See Tye (1995, 2000) for an example of an influential philosopher who argues that phenomenal content is intrinsically non-conceptual.
[292] Christopher Frith (1995) argues that damage to a comparator mechanism, which is claimed to generate the self-awareness that we have of our actions, may be responsible for all delusions experienced by schizophrenic patients
[293] See Pacherie, et al. (2006) for an overview of delusions of alien control, such as thought insertion.
[294] See Lafargue and Franck (2009) for an overview and analysis of the empirical data concerning felt effort and awareness.
[295] Frith also argues that phenomenal properties of self-awareness and felt effort are intrinsically related. See Frith (1987, 1992), and Frith et al. (2000) for a direct account of this, or Lafargue and Franck (2009) for a quick account of his position.

given what has been argued here, when the feeling of mental effort that is attributable to attention is identified, this phenomenal property will also be found to necessarily involve a feeling of authorship. With this in hand, the feeling of mental effort will now be tested against the three criteria that it needs to satisfy in order to be attributed to attention.

The feeling of mental effort is often involved in the performance of mental acts. When it is, it is a feeling of mental investment, a feeling of one's mental energies being used in some way. In what follows, felt mental effort will be tested against the three criteria developed in this chapter. It will be strongly argued to satisfy the first of the three criteria, and tentatively argued to satisfy the second. However, felt mental effort, broadly construed, will be argued to not satisfy the third criterion. Given this, the kind of felt mental effort that is peculiar to mental acts when people refer to them as forms of 'attending', and satisfies the final of the three criteria, will be identified. This form of felt mental effort is a feeling of directed mental effort. As this feeling will also be identified as the only property that satisfies the three criteria, it will be asserted to be the feeling that people attribute to attention and describe in terms of 'focus' or 'concentration'. With this, the phenomenal property that is sought after in this chapter will have been identified.

7.1. Attention is causally responsible for a feeling of mental effort

Thinking is often a directed, strenuous activity. Particular trains of thought are often followed in this activity, and usually for a particular purpose. People talk of 'concentrating' on such thoughts, of 'focusing' on them, and of being 'deep' in them. They use this terminology to describe a pronounced feeling of mental effort that is experienced when the activity is performed. In these cases, one feels their mental resources actively being used in order to follow the thoughts that are being entertained. It is in these cases that people are most likely

to be said to be 'attending' to their thoughts.[296] On the other hand, there are cases where thinking can follow random, tangential paths. In these cases, people talk of 'mind wandering', and being 'lost' in their thoughts. There is no distinct feeling that accompanies the activity of thinking in here. It feels to be an effortless activity. People are never described as if they are 'focusing', or 'concentrating' on what they are thinking in such scenarios. Moreover, in such cases people are not described as 'attending' to their thoughts. What can be seen from this is that the same kind of activity – thinking – involves a feeling of mental effort when it can intuitively be described as a form of 'attending', and does not when it cannot. Therefore, the feeling of mental effort satisfies the first criterion. Attention can be held causally responsible for the feeling of mental effort, given that it is exhibited in acts when they can be considered forms of attending, and is not exhibited when they cannot be considered forms of attending.

7.2. People always feel mental effort when they attend

In what follows, the feeling of mental effort will be tentatively argued to be common to all mental activities when they can be referred to as forms of 'attending', and will thus be argued to satisfy the second criterion for a phenomenal property to be attributable to attention. To do this, two arguments against this position will first be assessed. First, there is the possible claim that involuntarily attending to stimuli often does not involve a feeling of mental effort. Second, there is the more substantial and very common claim made by psychologists that there is a phenomenon known as 'effortless attention', and that sometimes people do not experience felt mental effort in activities that involve their attention.[297] The first of these claims will be argued to be misguided. The second claim will be rejected here, on the basis of rejecting the interpretation of the feeling of mental effort held by the psychologists who study

[296] See Martin (1997 and 1998A), for an account of 'conscious active thoughts' as those thoughts which are forms of attending in the way described here.
[297] See Bruya (2010), Dietrich and Stoll (2010) Csikszentmihalyi and Nakamura (2010), and Posner et al. (2010).

'effortless attention'. This rejection will be a tentative one, and may be shown to be unjustified with empirical studies. Nonetheless, good reasons will be provided to support it. With this in hand, and given that there are no other obvious cases of 'attending' that do not involve felt mental effort, felt mental effort will be argued to satisfy the second criterion.

A preliminary analysis of phenomenal experience identifies cases of involuntarily attending things perceptually as activities which may not involve a feeling of mental effort. For example, one may attend to a sudden flash of light, and feel 'drawn' to the stimulus. In such a case, no feeling of mental effort seems to be involved in initiating the activity, effort that one feels when initiating many other activities. It is something that just happens, and does not feel as if it is something that one has intended to do. It could be claimed that the feeling of mental effort is not experienced in cases of attending such as this one, and so the feeling of mental effort fails to satisfy the second criterion and is not attributable to attention.

As will now be explained, the above case does involve a feeling of mental effort, and so it cannot be used to argue that mental effort fails to satisfy the second criterion. The activity just described, although it does not feel like one has intended to perform it, and does not feel as if one has expended any effort in order to initiate it, still involves a feeling of mental effort when one performs it. This is why cases of involuntarily attending to things visually are described with metaphors of rough physical contact, where people often say that things 'grab', or 'catch' their attention. Ultimately, in the case described, it feels as if one's mental energies are suddenly and involuntarily drawn to the flash of light. One does not feel any effort in order to draw those mental energies towards the flash of light, but one certainly feels mental effort directed towards the source of that light once one has been drawn to it. Given this, the case described does involve the feeling of mental effort, and so felt mental effort does not fail to satisfy the second criterion on the basis of it.

In general, people come to attend to things involuntarily by looking at them, listening to them, thinking about them, and so on, and when they do they could be described as feeling 'drawn to them', or as feeling like that they have suddenly come to 'lock on to them' as opposed to something else. With these expressions, they pick out a feeling that they have, that of their mental energies being directed towards something. This is itself a feeling that can be characterised as a feeling of mental effort. Given this, across all cases of involuntarily attending to things, the feeling of mental effort is experienced, and can be identified as the feeling of one's resources being directed toward something, after being involuntarily drawn to that thing initially. As such, it can be concluded that mental effort is always experienced by agents when they involuntarily attend to things. As a result, cases where people involuntarily attend to things cannot be claimed to be cases where the feeling of mental effort is not experienced, and so cannot be used as the basis of an argument that felt mental effort fails to satisfy the second criterion.

One might query the position that people consciously experience their mental energies drawn to, or directed to things whenever they involuntarily attend by referring to the claims made in the article by Jiang et al., 'A gender-and sexual orientation-dependent spatial attentional effect of invisible images'.[298] This study describes situations where the attention of agents is said to be involuntarily and unconsciously directed towards images of nude bodies. For present purposes, it is important to note that the agents do not feel their mental energies drawn to or held by the nudes in the study. If the subjects are considered to be 'involuntarily attending' to the nudes, the research could pose a counterexample to the position developed in the present thesis. There are two reasons for doubting that any genuine counterexample is actually posed in the Jiang et al. studies. First, Jesse Prinz argues that the studies do not involve people attending to the nudes, even involuntarily, but rather involve

[298] Jiang, et al (2006).

behaviour induced by microsaccades, behaviour that Prinz identifies as inattentive.[299] There is no need to take a stance on this matter, because there is a second reason why the examples in the study do not involve actions that qualify as forms of 'attending'.

This reason is that in the 'invisible nudes' study as described by Jiang et al., the agents involved do not experience a feeling of focus or concentration directed to the nudes. They are not conscious of them at all, and so feel nothing directed toward them.[300] In such circumstances, agents would not describe themselves as 'attending to the nudes' since they are not even aware of them, and do not experience any focus or concentration directed to them. Indeed, as has been demonstrated in this chapter, people refer to mental acts as forms of 'attending' on the basis of a feeling of focus, or concentration. So the actions of the agents in Jiang et al.'s study do not seem to be forms of attending, and hence are not counterexamples to the position that involuntary attending is accompanied by a feeling of one's mental energies being drawn to, or held by something. With this in hand, 'effortless attention' will now be discussed.

Through the seminal works of Mihaly Csikszentmihalyi, a phenomenon known as 'flow experience' has become widely discussed by many psychologists.[301] This phenomenon occurs in some activities, where people feel as if they are carried along by the 'flow' of the activity, and do not feel any difficulty concentrating whilst performing it. This kind of experience occurs in a variety of activities, from thinking about philosophy, to playing sport, where it feels as if all of one's energies are easily and efficiently put into performing the activity. It is often referred to as an experience of 'being in the zone' whilst doing something, and is regarded by experts on flow experience as an optimum state for people to be in, one where they generally perform the activity at their best, without the propensity to be easily

[299] Prinz (2011).
[300] Jiang, et al (2006).
[301] For the original account of 'flow experience' see Csikszentmihalyi (1975). For influential accounts of flow experience by Csikszentmihalyi see Csikszentmihalyi (1988), Csikszentmihalyi (1990), and Csikszentmihalyi (1997).

distracted.[302] Controversially, it has recently become commonplace for many psychologists, including Csikszentmihalyi, to claim that many activities that involve flow experience are also accompanied by a phenomenon known as 'effortless attention'.[303] The use of the expression 'effortless attention' is intended to describe a phenomenal feature of these activities. Many psychologists describe these activities as involving 'effortless attention' as they think that they involve no felt mental effort, but do involve the manifestation of attention in experience.[304]

When people attend they often have flow experience. For example, if one attends to a book, one may feel 'carried along by the flow' of the activity, and 'get lost' in the book. So, if what psychologists like Csikzentmihayli claim is true and people do not feel any mental effort when they have flow experience, but rather experience 'effortless attention', then those cases of attending where people have flow experience do not involve felt mental effort. This means that, if this is true, mental effort is not felt across all mental activities when they can intuitively be referred to as forms of 'attending', and so the feeling of mental effort fails to satisfy the second criterion for a phenomenal property to be attributable to attention. In what follows, it will be tentatively argued that 'effortless attention' does not exist, and that people actually feel mental effort when they have flow experience. Therefore, the position taken here will be that mental effort does not fail to satisfy the second criterion on the basis of flow experience.

A recent chapter by Csikszentmihalyi and Jeanne Nakamura, where they discuss the phenomenology of 'effortless attention' in everyday life, will be assessed in order to identify how and why psychologists come to think that flow experience involves attention, but not felt mental effort. This chapter will be used here, given that it builds upon Csikszentmihalyi's

[302] Csikszentmihalyi (1990).
[303] For examples of accounts of flow experience that explicitly refer to flow experience as something that involves 'effortless attention' see Bruya (2010), Dietrich and Stoll (2010) Csikszentmihalyi and Nakamura (2010), and Posner et al. (2010).
[304] See Bruya (2010) and Csikszentmihalyi and Nakamura (2010).

work and other developments in the field.[305] With it, the clearest identification of what psychologists consider 'flow experience' to be, and how they come to the conclusion that activities which involve 'flow experience' also involve 'effortless attention', is provided. Having done this, examples using the flow experience of computer gamers will be used to suggest that flow experience is best considered as a kind of experience that does involve felt mental effort.

In their chapter Csikszentmihalyi and Nakamura argue that often activities involving a good deal of attention feel effortless. As examples, they bring up cases such as being engrossed in conversation, playing chess, reading books, and playing sports where people find no difficulty in engaging in the activities attentively, and get lost in them.[306] These examples are all classic cases of the kind of flow experience that Csikszentmihalyi describes in his earlier work, where people feel as if they get into the 'flow' of the activity, and experience their energies as something that are easily and efficiently brought to bear in it.[307] The reason that Csikszentmihalyi and Nakamura think that the cases of flow experience they describe do not involve felt mental effort will now be explained.

In their chapter Csikszentmihalyi and Nakamura draw upon an empirical study. In this study 858 teenagers were asked about their experiences of mental effort, and of attention in different activities.[308] To determine the level of attention that the teenagers felt they asked them how high their level of concentration was in an activity ('how well were you concentrating?'). To determine the level of mental effort that the teenagers felt they asked them how easy it felt to concentrate in that activity ('was it hard to concentrate?').[309] This kind of prompting identifies the interpretation of felt mental effort that is at the foundation of

[305] See Csikszentmihalyi and Nakamura (2010). This paper takes into account the developments in accounts of flow experience, particularly those by Csikszentmihalyi himself since his seminal work in 1975. In particular, it accounts for developments in the method of getting reliable subject reports from people about their experiences. For this, see Csikszentmihalyi and Larson (1987), and Hektner, Schmidt, and Csikszentmihalyi (2006).
[306] Csikszentmihalyi and Nakamura (2010, p. 181).
[307] Csikszentmihalyi (1975).
[308] This study was the 'Sloan Study of Youth and Social Development', reported in Csikszentmihalyi and Schneider (2000).
[309] Csikszentmihalyi and Nakamura (2010, p. 183).

the concept of 'effortless attention'. The concept of felt mental effort is understood in terms of how difficult it feels to maintain concentration in an activity.[310] This results in the feeling of mental effort being denied as something that is experienced in cases of flow experience, as concentrating in activities when one has flow experience does not feel difficult. On the contrary, concentrating in them feels extremely easy, where it feels as if one can keep concentrating with no difficulty. This is quite apparent in activity that the teenagers in the study would probably be familiar with - playing computer games. In this activity it is common to see teenagers have flow experience, oblivious to the goings on around them, with all of their energies feeling easily invested into the activity.

If the way that felt mental effort is understood in this study and in all other studies which discuss 'effortless attention'[311] were accepted then when people attend and have flow experience they do not feel mental effort. Instead they feel 'effortless attention'. In what follows, the way that the concept of felt mental effort is defined by those who discuss 'effortless attention' will be tentatively rejected, and, as a result of this, the general concept of 'effortless attention' will also be rejected. It will be suggested that the feeling of mental effort is better considered generally, as a feeling of one's mental energies being invested into something at a given time, and that this feeling does not necessarily manifest itself as something that is difficult to maintain. This will lead to the rejection of the concept of 'effortless attention', as under this interpretation of felt mental effort people experience a feeling of mental effort when they have flow experience. To reach these conclusions, a common activity where people enjoy flow experience will be drawn on as an example.

[310] Ibid.

[311] See Csikszentmihalyi and Nakamura (2010). This interpretation of effortless attention builds upon the ideas in Csikszentmihalyi's seminal work (1975), and has the same notion of the feeling of mental effort that is found throughout the book of collected essays Effortless Attention: A New Perspective in the Cognitive Science of Attention and Action. In this volume terms such as 'exertion' and 'strain' are used to describe the feeling of mental effort, and the feeling of mental effort is of something that is difficult to bring to bear, or to maintain. For examples, see Bruya (2010, pp.3-5), Dormashev (2010, pp.310-311), Schmeichel and Baumeister (2010, p. 37).

Activities which involve flow experience are generally ones that people enjoy. The people who perform them often possess a good deal of what psychologists such as Csikszentmihalyi refer to as 'intrinsic motivation' to engage in them. This term describes the motivation people have to perform activities solely on the basis of the rewarding nature of the processes which constitute them, and not any external factor.[312] Examples of flow experience are extremely subjective, and depend on the kind of activity that an individual finds rewarding. Given this, an activity that creates flow experience for many people will be used as an example so that the discussion which follows can draw upon non-controversial and commonly experienced cases of flow experience. As was discussed earlier, computer games often seem to generate flow experience for many young people.[313] They also possess a high level of 'intrinsic motivation' for many young people.[314] So, computer gaming will be the activity that is the subject of the discussion which follows.

Some computer games are colloquially referred to as 'first-person shooters'. In a first-person shooter, often referred to as an 'FPS', the avatars of players roam around computer generated maps, aiming to shoot, stab, or blow up their opponent's avatars. They are often played over local area connections or over the internet in multi-player games. These games require intense and sustained concentration, and rely on the player using their anticipation and reflexes in order to succeed. They are also, for a huge number of young people, intensely enjoyable and engrossing.[315] They are, in terms of the experiences of many avid gamers, things that generate a classic case of what Csikszentmihalyi refers to as 'flow experience'.[316] Gamers play them for hours on end without breaks, getting 'lost in them', and seem to feel no

[312] For the original account of what is now called 'intrinsic motivation' see Woodworth (1918). For influential accounts of intrinsic motivation in psychological literature see Deci and Ryan (1985), and Heckhausen (1991, pp. 403-413). For an account of the close relationship between intrinsic motivation and flow experience see Rheinberg (2008).
[313] This claim is supported by some analysis. See Cowley et al. (2008), Inal and Cagiltay (2007), and Voiskounsky et al. (2004) for a discussion of flow experience in computer games.
[314] See Wang et al. (2008) for an account intrinsic motivation in computer games.
[315] See Frostling-Henningsson (2009) for an account, and analysis, of the experiences of gamers playing a first person shooter game 'Counterstrike'.
[316] Csikszentmihalyi (1975)

difficulty whatsoever in maintaining their concentration on them. Indeed, it feels difficult for many gamers to stop concentrating on them.[317]

Suppose that skilled FPS gamers who are gaming against equally skilled opponents are asked, not whether they are concentrating, nor whether it feels easy to concentrate, but rather if their activity feels effortful. Intuitively, it seems likely that they would say that it does feel effortful. FPS games are frenetic, require numerous shifts of visual attention around the digital environment, and require a high degree of anticipation. Players have to be constantly on their guard, aware of where their avatar is situated on the map, and aware of where the avatars of other players are likely to be situated. It seems a bit odd to think that gamers would say that this high-paced activity is not accompanied by a feeling of mental effort. However, it also seems likely that gamers would say, if asked, that their mental effort often feels like something that is easily expended while playing these games. They would likely say this on the basis that they know exactly how to perform well in these games, and correspondingly that they can engage in them easily and 'get into the zone' while performing them, experiencing the feeling of mental effort as something that 'flows' from them into the activity without difficulty.

The reason that gamers have been assumed to react in this way to this line of questioning is that the interpretation of felt mental effort that they have been assumed to hold is not of felt mental effort as an intrinsically difficult feeling. Rather it is assumed that they would construe the feeling of mental effort to be the feeling of their energies being invested into the game at the time, and although this can be a difficult feeling, it often isn't. Crucially, when they are assumed to say that they feel effort as something that is easily expended, they are saying something which goes against the concept of 'effortless attention'. This is the case in these circumstances as they are having flow experience, yet are describing themselves as

[317] See Van Rooij (2011) for an in depth account of online computer game addiction.

feeling mental effort. It is important to note that the interpretation of the feeling of mental effort that has been attributed to these hypothetical gamers is one that gamers are only speculated to hold. Real gamers may respond differently, if asked. As such, another computer game example will be used to give some intuitive support for this interpretation of the feeling. Then, an account of how this understanding of felt mental effort correlates more neatly with the concept of effort generally will be provided.

FPS gamers find it difficult to focus, or concentrate, when playing a game if the difficulty of the game they are playing is too low. As empirical evidence shows, gamers get bored and find that it feels difficult to continue focussing or concentrating on their game if it is too easy.[318] Now, if skilled FPS gamers were asked which activity they feel more effort being expended in – playing an easy game that bores them or playing a difficult one in which they have flow experience – it seems likely that they would say that playing the difficult game feels more effortful than the easy one. Easy games feel like they require no energy or thought to play, despite feeling unpleasant to engage in. They are slow, boring and predictable. It seems strongly counter-intuitive to describe them as involving more felt mental effort than difficult games, which are frenetic, require pinpoint accuracy, good reflexes, and quick and continuous visual scans of a computer screen. However, if the feeling of mental effort is interpreted as a feeling of something that is difficult to maintain, then the difficult game in which flow experience occurs feels less effortful than the easy game does for skilled FPS gamers. In fact, under this interpretation, not only does the difficult game in which flow experience occurs involve no felt mental effort for skilled FPS gamers, the easy game feels extremely effortful, as it feels quite hard to keep playing a boring game.

The example of the boring game shows that interpreting the feeling of mental effort as something that is difficult to maintain is problematic. It shows that this interpretation of felt

[318] See Nacke and Lindley (2008).

mental effort results in the counter-intuitive position that playing an easy game which feels very difficult to maintain concentration in, but requires almost no mental energy, feels more effortful than playing a difficult game in which flow experience occurs. However, if the feeling of mental effort is to be taken as the feeling of one's mental energies being brought to bear in some manner, this counter-intuitive position does not result. One feels less mental energy when the boring game is played, and feels more of it invested in the hard game in which flow experience occurs, and so under this interpretation the game in which flow experience occurs involves more felt mental effort. This gives some support for the feeling of mental effort being understood as a feeling of one's mental energies being used. Moreover, as will now be explained, this understanding of felt mental effort seems to correlate better with the idea of effort more generally than does the alternative.

Effort, construed generally, is a thing that one expends through doing something. One need not feel it at all, and it need not involve any difficulty. For example, a construction worker who is operating a piece of machinery, and is used to operating it, may zone out and not attend to what they are doing. When this happens they do not feel any effort, and the performance of the task is not difficult for them, yet it is perfectly acceptable to consider them to be expending 'effort' in a non-phenomenal sense while performing the task. However, effort as a general concept is a concept of something that necessarily involves the expenditure of energy. There are no conceivable instances in which one can be considered to be 'putting in effort' yet not expending any energy at all. Given that the concept of effort is a concept of something that necessarily involves the expenditure of energy, but not necessarily any difficulty, the idea that felt mental effort should be simply understood as the feeling of mental energy being used, rather than a feeling of something that is difficult to maintain, is given support. In sum, this interpretation of the feeling of mental effort correlates with the general

concept of effort more neatly. As such, and on the basis of the computer game examples used earlier, this is the interpretation of felt mental effort that will be endorsed here.

The experience people have of flow experience, from chess to athletics will not be taken as an experience of 'effortless attention'. This is the case, as, under the interpretation of felt mental effort provided here, people feel mental effort when they have flow experience. They experience it as the feeling of their mental energies being easily and sustainably invested into something. So, this allows the tentative conclusion of this section to be arrived at, which is that the feeling of mental effort does not fail to satisfy the second criterion on the basis of flow experience. This conclusion is tentative as it could be shown to be false through an empirical study of the way people conceive of felt mental effort. People may conclude that the feeling of mental effort is intrinsically a feeling of something that is difficult to maintain, under all circumstances. Despite this, in lieu of such a study, there are good reasons to support the interpretation of felt mental effort as a feeling of one's mental energies being used over this interpretation. This was seen through the computer game examples, and through the way both interpretations of the feeling of mental effort correlate with the general concept of effort.

The feeling of mental effort has now been argued to satisfy the second criterion in the instances where it could be considered to have failed it. Moreover, it seems to satisfy this criterion generally. In all activities that can be intuitively considered forms of 'attending' from thinking about philosophy, to watching sport, it seems as if one can feel their mental effort, or energies, being involved in the performance of the activity. So, on this basis, it will be taken that the feeling of mental effort satisfies the second criterion. With this in hand, mental effort will be tested against the final criterion, which is that felt mental effort must be peculiar to all mental acts that can be referred to as forms of 'attending'. As was flagged, this feeling will be shown not to be peculiar to all forms of attending, and so the feeling of mental effort fails to satisfy this criterion. However, a particular variant of this feeling, a feeling of

one's mental effort being directed onto something else with phenomenal properties, will be argued to be peculiar to activities that can be referred to as forms of 'attending', and so will be argued to satisfy the final of the three criteria.

7.3. Directed mental effort is peculiar to attending

Deciding on a course of action to take on an issue often involves a feeling of mental effort. It is reflected by the terminology that people use, when they talk of the felt mental effort and energy involved in making a 'tough decision'. Moreover, simple reflection on what it feels like to make difficult decisions identifies a good deal of felt mental effort. However, deciding does not seem to be a mental act that can be considered a form of attending. This is shown through the terminology people use in everyday discourse. People describe looking and thinking, in terms of 'attending' to an object, or a thought content, but never describe the act of deciding itself in terms of 'attending' to anything. It is true that people can be described as 'attending' to a decision, or 'attending' to the thought that one has to be made, and can be described as 'attending' to the choices available to them in coming to make a decision by thinking about them, but the act of deciding itself seems to be one that cannot be characterised as 'attending' to anything. The act of deciding itself, that is, the act of forming an intention to pursue a certain course of action over others[319], is something that seems to only be able to be described in one way – as 'deciding'. As deciding cannot be considered a form of 'attending', and as it often involves felt mental effort, felt mental effort, broadly construed, fails to satisfy the third criterion. It is not peculiar to activities that people call 'attending', and so is not a phenomenal property that is unique to the experience people have of attention. However, as will now established, there is a kind of felt mental effort that is peculiar to mental acts which

[319] See Sheperd (2013, p. 19). At the outset of the article Sheperd explains the different ways in which deciding has been interpreted by philosophers. The view taken here is the one that he attributes to 'most philosophers', which is that decisions are 'mental actions of forming intentions'.

can be called forms of 'attending', one which can be differentiated from the felt mental effort that is experienced in mental acts like deciding.

Sometimes making a decision involves a feeling of mental strain. It feels like one is involved in a difficult mental process. It could be talked about as a general feeling of 'exertion', which is hard to maintain, and requires isolation from other activities in order to be successful. However, the feeling of mental effort involved in the act of deciding does not feel like something that is directed on to something else that is also experienced. Of course, one may feel mental effort directed on to the choices of action available to one prior to making a decision by 'weighing them up'. However, this is not the feeling of mental effort involved in the act of deciding itself, but is rather the feeling of mental effort that is involved in thinking about the pros and cons of the choices of action available to one prior to making the decision. Ultimately, the feeling that is often involved in the act of deciding itself, while feeling like mental effort, in that one does feel the expenditure of mental energy in performing the activity, does not feel like mental effort that is directed on to anything that one experiences. The reason for this is that the act of deciding is the act of forming an intention, and one cannot feel any mental effort directed towards an intention, as intentions themselves do not manifest themselves in phenomenal experience.[320]

This above analysis identifies the point that is sought after here. In deciding, when people feel mental effort, they never feel it as something that is directed to anything that they experience at that time. By contrast, in all forms of activities that can be referred to as 'attending', mental effort is experienced as directed towards things that are also experienced at that time. This is why whenever people are described as 'attending' to something, there is always a phenomenal feature of their experience that they can be said to 'attending to'.

[320] The feeling of something being *caused by one's intentions* often does, as was stressed earlier. However, there is no phenomenal property that seems to be able to be described as something that is an intention, just as there is no phenomenal property that seems to be able to be described as something that is a belief. This is in contrast this with thoughts, perceptions, pains, emotions, attention, etc., which all have phenomenal properties that can be identified as representative of that phenomenon.

Importantly, not only do all mental acts that can be referred to as forms of 'attending' involve the feeling of directed mental effort, only those mental acts that can be referred to as forms of 'attending' exhibit this phenomenal property. As will now be argued, the reason for this is that the feeling of directed mental effort should be identified with the feeling people attribute to attention in their experience and understand in terms of a feeling of 'focus' or 'concentration'.

The feeling of directed mental effort seems to be the same kind of feeling that people pick out, whenever they describe the feeling of 'focus' or 'concentration'. Just as with the feeling of directed mental effort, whenever people describe the feeling of 'focus' or 'concentration', they describe a feeling of their energies being directed towards something else with phenomenal properties. This is seen through the terminology that people use, where one can only ever be said to 'focus on' or 'concentrate on' something, and not just 'focus' or 'concentrate' in general. Moreover, just as with the feeling of directed mental effort, the feeling of focus or concentration that people associate with attention is often described as a difficult feeling, and sometimes as an easy feeling. For example, people often describe how 'hard it feels to concentrate on something' or how 'hard it feels to keep focusing on something', yet also on occasion describe activities they like as 'feeling easy to focus on' or 'easy to concentrate on'. Furthermore, as was argued earlier, both the feeling of mental effort, and the feeling of focus, or concentration, constitutively involve a feeling of authorship. Ultimately, it seems that in any example one might want to develop, the feeling of focus or concentration has characteristics that are identical to those of the feeling of directed mental effort. Given this, and given that the feelings of focus or concentration as well as the feeling of directed mental effort are both necessary components of the experience people have when they attend, they will be taken to be identical with each other in this chapter.

As noted earlier in the chapter, people intuitively refer to mental acts as forms of 'attending' if they involve a feeling of focus, or concentration, and do not refer to them as forms of 'attending' if the feeling of focus, or concentration is absent. The feeling of focus, or concentration has also just been identified as identical with the feeling of directed mental effort. Therefore, if a mental act involves a feeling of directed mental effort, people will refer to it as a form of 'attending' and if it does not involve a feeling of directed mental effort, they will not refer to it as a form of 'attending'. The feeling of directed mental effort is thus exclusive to all mental acts that can be intuitively referred to as forms of 'attending' and so satisfies the final criterion for a phenomenal property to be attributed to attention. Given that it is a subcategory of a broader phenomenal property that has already satisfied the first two criteria – mental effort generally – the feeling of directed mental effort satisfies the three criteria developed here.

By satisfying the criteria, the feeling of directed mental effort is a property that (i) attention is causally responsible for, (ii) that is common to all cases in which attention manifests itself in phenomenal consciousness, and (iii) that is peculiar to all cases that involve attention within phenomenal consciousness. It has also been argued to be identified with the feeling of focus or concentration that people attribute to attention in their experience. So, it is also a phenomenal property that is (iv) sufficient for the experience that people have of attention. Given this, more than simply being a necessary part of the experience people have of attention, the feeling of directed mental effort is constitutive of it. It is best characterised as follows:

> People experience attention as a form of mental effort that is directed on something that is experienced. It is the feeling of 'locking on to', 'selecting', 'focusing on', or 'concentrating on' something with phenomenal features, be that a train of thought, a physical object, a smell, a

memory, an imagined creature, or any other of the wide variety of things with phenomenal characteristics.

The above is an account of the core feature of the experience people have of attention. In sum, it is a detailed account of the feeling of focus or concentration that people attribute to attention in their experience. An account of the finer details of the feeling will now be provided. Then, a description of this feeling will be posed as the third and final answer to the question 'what is attention?' provided in this thesis.

8. Attentional effort

The feeling of directed mental effort that has been attributed to attention, what will now also be referred to as 'attentional effort', has some important characteristics that need some clarification. The first of these characteristics is that it is something that people are aware of. The second is that the feeling displays different characteristics whenever it is experienced in different forms of attending (i.e. attending to an object through looking at it, attending to a train of thought through thinking about it, etc.). The third is that the feeling differs in intensity, in several different ways. Each of these characteristics will be discussed in turn.

8.1. Self-awareness

Given that attentional effort is a form of felt mental effort, it also constitutively involves a feeling of self-awareness, or authorship. This is the case because, as was made clear earlier, all forms of felt mental effort are necessarily feelings of one's own energies being used. For example, whenever a person lifts a box, and feels strain in their legs, they will necessarily feel the strain as something that comes from them. The kind of self-awareness involved in attentional effort will now be discussed.

People attend to things through looking at them, thinking about them, listening to them, and so on. When they attend in any of these ways they feel, and are correspondingly aware, that their own mental energies are being directed toward the thing they are looking at, thinking about, listening to, and so on. Given that the awareness they have is an awareness of their own mental energies being used, it is intrinsically a form of self-awareness. This is not a complex kind of self-awareness, and may not be conceptual.[321] For example, when people attend they do not have to believe, or judge that they are utilising their mental energies in a certain way. [322] They only need to experience themselves using these energies. As such, it is a basic kind of self-awareness, and can probably be something that is possessed by infants and some animals. However, although the self-awareness is basic, it is also particular to attention.

Whenever people use their attention, it does not feel like an experience of physical exertion, which feels as if it isolated to one's body. Nor does it feel like an undirected feeling of mental exertion, like that experienced in mental acts like deciding. It feels, to the people experiencing it, like mental effort that is directed on to something else. Ultimately, it feels like the kind of directed mental effort that people attribute to attention manifesting itself in their experience, and come to refer to certain mental acts as forms of 'attending' on the basis of. As such, people also experience a particular kind of self-awareness whenever they attend. That is, they are aware of their own energies being utilised in a certain way – being directed towards something else with phenomenal properties – whenever they attend. Importantly, as people hold that the feeling of directed mental effort is the feeling of attention manifesting itself in their experience, and as people have a specific self-awareness of this feeling whenever they attend, people are aware of attention manifesting itself in their experience whenever they

[321] Whether or not the feeling is conceptual is determined by the way one understands of the nature of conceptual and non-conceptual content.
[322] This is similar to the point argued by Watzl about the phenomenology of attention (2010, p. 72), where he claims that the reflexive awareness he attributes to attention need not be a conceptual form of awareness.

experience directed mental effort. In other words, they have self-awareness of utilising their attention, whenever they attend.

The kind of self-awareness that people experience of attention is not the only form of self-awareness that people can experience when they attend to things. People can experience a variety of different types of self-awareness when they attend. For example, they may have a general action awareness of the nature of the mental act that they are engaging in at a given time, and be aware that they are thinking about something, that they are looking at something, or that they are listening to something, and so on. They may also experience an awareness that the act that they are performing is one that is caused by their own intentions. However, the only form of self-awareness that is experienced in all forms of attending, is the awareness of attention being utilised in that mental act. As was stressed earlier, the only phenomenal feature that is shared by, and is exclusive to all mental acts that can be referred to as 'attending' is directed mental effort. As such, the only kind of self-awareness that people have, across all cases of attending, is the awareness that they themselves are utilising this mental effort.

To sum up, whenever people attend, they are aware of their own mental effort being directed towards something else. This can be anything with phenomenal properties, like a colour, a sound, or a train of thought. As was stressed, this is a basic form of self-awareness, and need not be conceptual. It is like the reflexive awareness postulated by Watzl in many respects, yet it is not a specific form of activity awareness. [323] Rather it is an awareness of an aspect of certain mental acts, an awareness that one's attention is being brought to bear in them.

Before the second major characteristic of attentional effort is discussed, the position that attending involves both effort and self-awareness will be quickly shown to have some

[323] Watzl (2010, p. 69).

empirical support. As was touched upon earlier, empirical studies have established that sufferers of schizophrenia have abnormal experiences of both effort and authorship.[324] It has been argued here that both these phenomenal properties are a constitutive component of the experience people have of attending. Accordingly, if what is argued here is correct, it should be expected that sufferers of schizophrenia will have trouble attending, given that they have abnormal experiences of the phenomenal properties that are a constitutive component of the experience people have of attending. Empirical studies show that sufferers of schizophrenia do in fact have trouble attending. [325] As such, the position developed here has some support, given it correctly predicts that sufferers of schizophrenia will have trouble attending. Obviously, this is not significant empirical support. It does not establish that the phenomenal properties of self-awareness and directed mental effort are intrinsically linked, nor does it give any picture as to the possible neural underpinnings of these linked properties.[326] Despite this, it provides some support, and without any empirical evidence to the contrary, it does strengthen the position developed here.

8.2. The feeling of attentional effort differs in different mental acts

Attentional effort, broadly construed, is a feeling of directed mental effort. However, some manifestations of attentional effort will not be exactly the same as others. For example, the feeling of directed mental effort involved in keeping track of something visually and the feeling of directed mental effort involved in focussing on a train of thought clearly display different phenomenal characteristics, despite both being feelings that can be characterised as forms of attentional effort. For a start, in one case the mental effort feels directed out to the world, whereas in the other it feels directed toward something that may be internal, such as a sub-vocalisation, or a visualisation. The reason that the feeling of attentional effort differs

[324] See Lafargue and Franck (2009).
[325] For an example see Wang et al. (2005).
[326]Providing strong evidence concerning the relationship between these phenomena at the sub-personal level will require significant empirical investigation, which is beyond the scope of this thesis.

between the two examples just described is that it is experienced in the performance of two different mental acts, and the feeling of attentional effort will always feel different whenever it is experienced in a different mental act. In what follows, a personal level explanation for why the feeling of attentional effort differs when it is experienced in different mental acts will be provided. Then, a sub-personal explanation for these differences will be supplied.

What makes any mental act a mental act of a particular kind, is the way that it is directed towards its objects, or contents.[327] For example, the thing that makes any instance of looking at something a form of looking is the way that the act is directed towards its objects or contents. It will be an act which constitutively involves the agent performing it being directed towards visual representations in a certain way through the utilisation of their visual faculties. Or to use another example, what makes any instance of listening to something a form of listening is the way that the act is directed towards its objects or contents. It will be an act which constitutively involves the agent performing it being directed towards auditory representations in a certain way through the utilisation their auditory faculties. As will now be explained, the directed nature of the feeling of attentional effort is determined by the way that the mental acts it features in are directed towards their objects or contents. From this, given that different mental acts involve different forms of directedness towards their objects or contents, it will be argued that attentional effort involves different feelings of directedness when it is experienced in different mental acts.

When people experience attentional effort, they experience it as part of a mental act that they are performing at the time. In particular, they experience it as something that is directed toward the thing that the act is about. For example, when one attends to a thought, one feels as if one's energies are directed towards whatever it is one is thinking at that time. Or, to use another example, if one is attending to some music, one feels as if one's energies

[327] This is much like the concept of an 'intentional mode' in a mental state, where the 'mode' refers to the way that state is directed on to its contents, and thus the kind of state it is. See Crane (2001) for a clear introduction to, and explanation of, this concept.

are directed towards whatever it is one is listening to at that time. Importantly, the way that attentional effort feels directed in any given instance is something that results from the particular way that the act it features in is directed towards its contents, or objects. This can be seen through three examples. First, the attentional effort involved in looking at something feels as though it is effort directed through one's visual faculties toward something visually perceived. Second, the attentional effort involved in thinking something feels as if it is effort that is directed through one's cognitive faculties toward a train of thought.[328] Finally, the attentional effort involved in listening to a talk feels as if it is effort that is directed through one's auditory faculties toward what a speaker is saying. Ultimately, in each of the aforementioned examples, and in any other example one might use, the feeling of directedness involved in attentional effort is determined by the kind of directedness that is constitutive of the act that it features in (be directedness through one's visual faculties, auditory faculties, etc.).

To sum up, the feeling of attentional effort is a directed feeling, and the way it feels directed in any given instance is determined by the kind of directedness that is constitutive of the act that it features in. This is demonstrated through the above examples, where the attentional effort involved in looking at something feels directed through one's visual faculties, the attentional effort involved in thinking about something feels directed through one's cognitive faculties, and the attentional effort involved in listening to something feels directed through one's auditory faculties. As all different mental acts involve different forms of directedness, this means that whenever attentional effort is experienced in different mental acts, it will display different characteristics. With this, a personal level explanation of why the feeling of attentional effort differs between different mental acts has been provided. A

[328] 'Cognitive faculties' is an admittedly vague term. The reason it is used here, and is not elaborated upon is because, phenomenally speaking, it is difficult to identify the faculties that allow people to think things. This is the case as, unlike with perceptual faculties, there are no particular areas of the body that one experiences using when one thinks something.

possible sub-personal explanation for why the feeling of attentional effort differs between different mental acts will now be supplied.

The phenomenal differences experienced when attentional effort is utilised in different mental acts can be given an explanation through several theories concerning the nature of attention at the sub-personal level. These theories are Alan Allport's selection for action theory, Robert Desimone, John Duncan, and John Reynold's biased competition theory, and a theory that has already received a lot of discussion in this thesis - Christopher Mole's cognitive unison theory.[329] In such theories there is no particular neural basis of attention. They hypothesise that people bring different sub-personal processes to bear when they attend in different acts. This understanding of attention provides the capacity to give a sub-personal explanation for why attentional effort feels different when it is experienced in different mental acts.

If the aforementioned theories are endorsed, it can be argued that the differing feelings of attentional effort that people experience when they engage in different mental acts result from the varied sub-personal processes involved in these acts. This is the case, as these mental acts involve different sub-personal processes, and different sub-personal processes when in use, are likely to generate differing feelings of attentional effort at the personal level.[330] With this explanation in hand, an account of the different ways in which attentional effort can vary in its intensity will be provided.

8.3. Intensity of attention

The final feature of attentional effort is that it often varies in its intensity. In some activities there is a strong feeling of it, and in some it is barely felt. For example, playing computer

[329] See Allport (1987), Desimone (1998), Desimone and Duncan (1995), Reynolds and Desimone (2000), and Mole (2011).
[330] Given that Mole's theory is up to date with empirical data, and can allow for the use of non-perceptual brain mechanisms in attention (so giving it the capacity to explain attentional effort in thought and imagination), its explanation of this phenomenon is to be preferred over the other theories which are dated, and are limited to describing attention in terms of perceptual mechanisms alone.

games and thinking about complex philosophy often involve a very intense feeling of attentional effort, while watching television often involves this feeling in a very subtle way. This kind of variation in intensity is felt across most cases where people attend. However, the feeling of attentional effort does not only vary in intensity in one way. The feeling can be more or less intense in several different ways. In what follows, three different ways that the feeling of attentional effort can vary in intensity will be explored. This will begin with an account of how attentional effort can sometimes feel more or less difficult to maintain, will go on to an account of how attentional effort can sometimes feel more or less drawn to what it is directed upon, and will conclude with an account how attentional effort can involve a feeling of more or less of one's energies being expended at a given time.

As was discussed earlier, the feeling of mental effort can manifest itself as a feeling of something that is difficult to maintain. This occurs in many activities, where the mental effort involved in performing them is often referred to as 'strain', or 'exertion'. In such cases it feels as if one's energies are hard to utilise, as if there is some force preventing one from expending them for too long a time. This feeling is also often an aspect of the feeling of attentional effort. When it is, it feels as though it is difficult to maintain one's attentional effort directed toward the object of one's attention, and that one can only keep one's effort directed there for so long. The feeling that it is difficult to maintain one's attentional effort directed upon something often differs in its intensity. The ways in which it does will now be outlined.

Attentional effort can feel extremely difficult to maintain, almost to the point of being unbearable. People often experience this in complex activities that they are not used to, are not skilled at, or dislike. Good examples of this are found particularly at work, where people are engaged in activities that they would rather not perform and are difficult. In these cases people find focusing on the contents or objects of their mental acts difficult and are often easily distracted. The feeling can also be markedly less intense than this, and can manifest

itself only as a feeling that one's energies are only mildly difficult to maintain. This is found in cases involving simple activities where people are tired, distracted, or are disinterested. For example, when people have the choice between an easy to watch 'popcorn-flick' and an intellectually demanding film, they will often choose the easier to watch blockbuster, because they are tired and it will feel somewhat difficult to maintain their attention to the intellectually demanding film for a long time. Finally, in some cases the feeling of attentional effort does not feel at all difficult to maintain. The best cases of this occur when people have what Csikszentmihalyi refers to as 'flow experience', which was discussed earlier.[331] Ultimately, the feeling of attentional effort can manifest itself as a feeling of directed effort that is extremely difficult to maintain, going all the way down to a feeling of mental effort that cannot be characterised in terms of something feeling difficult to maintain at all. In this way, the feeling of attentional effort varies in its intensity dramatically.

The second way that the feeling of attentional effort can differ in intensity is that it can feel as if it is drawn to something, or is held by something, to a greater or lesser degree. People always experience that their attentional effort is being drawn to something, or held by something, whenever they involuntarily attend. Moreover, in different cases where people involuntarily attend, the feeling of their attentional effort being drawn to something, or held by something, often differs in its intensity. As such, in order to explore this feature of attentional effort, two examples of involuntary attention will now be discussed.

To begin, the feeling that one's attentional effort is drawn to something, or is held by something, is extremely intense in cases of involuntary, obsessive thinking. In such cases people often feel as if they cannot stop giving all of their energies to thinking a particular train of thought, or about a certain subject matter. It is often a negative feeling for people because, try as they might, they cannot give mental effort to anything else, and cannot stop putting all

[331] See Csikszentmihalyi (1997).

of their effort into thinking these things. Their thoughts are said to 'consume' them. In other cases of involuntary attention, the feeling that one's attentional effort is drawn to something has nothing like this intensity, despite still feeling drawn to something in a more subtle way. A good example of this is that of a hearing a slightly distracting fly, buzzing around one's head, while one is trying to give one's attention to another activity that is being concurrently performed.[332] In such a case, one's attention can be said to be 'drawn', or 'attracted' to the fly, away from whatever other activity one is performing at that time. In this case, it feels as if one's energy gets drawn, but not inexorably, toward the source of the sound. Indeed, in such a case one can shift one's attention away from the fly, perhaps with a small amount of difficulty. Given this, it is clear that one's attentional effort can often feel more or less drawn to things, from feeling strongly drawn to them in the case of the obsessive thoughts, to feeling relatively mildly drawn to them in the case of the fly.

Attentional effort does not only feel as if it is drawn to something when people involuntarily attend. It can also often feel as though it is drawn to things when people voluntarily attend. This often occurs in flow experience, where people feel as if their attentional effort is being sustained by something that interests them, and they are carried along by the 'flow' of the activity. However, sometimes when people voluntarily attend to things, their attentional effort does not feel at all drawn to, or held by, what it is directed toward. For example, if a student is required to sit a maths exam, and would rather play football with her friends, she may have to force herself to attend to the content of the exam, even though she dislikes maths and finds it repellent. In such a case, it could not be said that the student feels drawn to attend to the content of the maths exam. Indeed, in this case, it could be argued that her attentional effort does not feel like it is drawn to a particular target at all, but is instead pushed. Given that there are instances where people do not feel their

[332] This is similar to an example used by Mole (2011, p. 47).

attentional effort being drawn to things at all, then the feeling of attentional effort can differ in intensity greatly, from feeling like it is strongly drawn to things, to not feeling like it is drawn to things at all.

To sum up, people can feel that their attentional effort is drawn to something to a greater or lesser degree, or even not at all, whenever they attend. It is a prominent way that the feeling of attentional effort can differ in intensity across cases. The final way that the feeling of attentional effort can differ in its intensity will now be discussed.

People can feel varied levels of attentional effort being invested into whatever activity they perform. For example, people can feel varying levels of their attentional effort being invested into looking at an object in the distance, from only looking at it, to staring at it intently. Or, to use another example, people can often feel varying levels of attentional effort being invested into what they read. They can feel as if their energies are only directed at what they are reading in a light way, where they are casually reading it (e.g. the feeling people get whilst reading a fictional novel), or they can feel that their energies are invested in what they are reading heavily, where they read it slowly, and very carefully (e.g. the feeling people get whilst editing an academic text). Or, to use a final example, people can listen to something casually, feeling as if their attentional effort is invested into it mildly, or can listen to it closely, feeling as if their attentional effort is invested into it heavily. Given these examples, it is clear that within particular kinds of attending people can often feel their attentional effort vary in its intensity, from feeling as if it is heavily invested in the activity in question, to feeling as if it is only mildly involved in the activity.

Importantly, the feeling of attentional effort coming in degrees is qualitatively different in different activities. For example, it does not seem like the variations in investment that one can feel in one's attentional effort when one is looking at something, reading something, or listening to something are similar enough to compare. The attentional effort

involved in the activities feels quite different, and this includes the ways in which the feeling of effort seems to come in degrees. Despite this, within any given activity there seems to be the capacity for the feeling of attentional effort to vary in degree, from feeling heavily invested in the activity, to feeling only mildly invested in it, as was demonstrated in the examples in the previous paragraph.

Preliminary sub-personal explanations for why the feeling of attentional effort can feel (i) difficult to maintain, (ii) drawn to things, and (iii) like more or less of it is being invested in an activity, will now be entertained respectively. First, as was discussed in the previous chapter, Mole's theory of attention provides an account of how sometimes it is difficult for people to maintain cognitive unison in a task, and so perform it attentively, when this task is in competition with other tasks for available processes.[333] Indeed, the theory holds that this competition can make the cognitive unison held in the task unstable.[334] It may be that when any given state of cognitive unison is unstable, this makes attentional effort feel difficult to maintain at the personal level (i.e. when a person is trying to attend to something but finds it hard to do so as there are various distracting things competing for their attention). Second, people always feel as if their effort is drawn to things when they involuntarily attend. When people involuntarily attend to things many 'bottom up' attentional mechanisms, which are mechanisms that involuntarily draw people to focus on stimulus, are often in use.[335] For an agent, these mechanisms may illicit a feeling of mental effort being drawn to something when they come to be used, given that their automatic allocation at the sub-personal level may manifest itself as a feeling of being involuntarily drawn to something at the personal level. Third, whenever people attend, they bring to bear multiple sub-personal processes in order to do so, and these may manifest themselves as feelings of attentional effort at the personal level.

[333] See Mole (2011, pp. 75-79).
[334] Ibid.
[335] See Corbetta, Patel, and Shulman (2008), Corbetta and Shulman (2002), and Peelen, Heslenfeld, and Theeuwes (2004), for an account of some of bottom-up attentional mechanisms.

Given that these sub-personal processes often differ in their level of activation, this can provide a possible explanation for why attentional effort can feel as if it comes in degrees within certain activities. [336] Indeed, Mole's theory was demonstrated to give good explanation of this last aspect of attentional effort in the previous chapter. [337]

It must be stressed that the aforementioned explanations are preliminary, and may only be able to account for some circumstances in which the features described in this section are exhibited. To develop sub-personal explanations of why the feeling of attentional effort can differ in its intensity in any of the three ways described in this section, sustained empirical research and analysis is required. This is beyond the scope of this chapter. The aim of this chapter was to provide the experiential answer to the question 'what is attention?' As such, an explanation of how this aim has been achieved in this chapter will now be supplied.

9. The final answer to the question

In this chapter, an account of the phenomenology of attention that posits that attention is experienced as a form of directed mental effort called 'attentional effort' was developed. The basic tenet of the account of the phenomenology of attention developed here is that whenever people attend, they experience attentional effort. This form of effort has been argued to represent the manifestation of attention in experience, and to be the thing that determines whether or not any given mental act can be considered a form of attending. Essentially, it has been argued to be what people experience attention to be.

The account developed here is open to empirical refutation, as it is based on an account of the nature of felt mental effort that people may reject. Under this interpretation felt

[336] See Allport (1987), Desimone (1998), Desimone and Duncan (1995), Reynolds and Desimone (2000), and Mole (2011) for theories of attention which describe some of these mechanisms. As has already been seen, Mole's theory gives a good account of this phenomenon. Mole's theory is to be preferred on its explanation, as it can give an account of non-sensory brain mechanisms involved in attention, and so is better equipped to describe attention in activities that are not exclusively sensory, like thinking about a certain subject matter.
[337] See sections 7.3 and 7.4 of chapter three.

mental effort does not intrinsically involve a feeling of difficulty, but often feels like something that is easily expended. Empirical evidence may show that an alternative interpretation of felt mental effort, like that endorsed by psychologists of flow experience in which felt mental effort always feels difficult, is the correct one. Nevertheless, there are good reasons to assert that the feeling of mental effort should be conceived of in the way that it has been here, and so the account of attentional effort developed here may still be justifiably endorsed. As such, the experiential answer to the question 'what is attention?' that is posed in this thesis will now be provided through a description of attentional effort. In short, the experiential answer to the question 'what is attention?' is that:

> Attention is a feeling of directed mental effort. It is the feeling of 'locking on to', 'selecting', 'focusing on', or 'concentrating on' something with phenomenal features, be that a train of thought, a physical object, a smell, a memory, an imagined creature, or any other of the wide variety of things with phenomenal characteristics.

This kind of directed mental effort has been argued to intrinsically involve a feeling of authorship, as it is a feeling of one's own energies being directed onto something else with phenomenal properties. Moreover, it has also been argued to have the capacity to exhibit a variety of different features when it manifests itself in phenomenal consciousness. These features include that it feels different when involved in different mental acts, that it can sometimes feel difficult to maintain, that it sometimes feels drawn to things, and that people can sometimes feel as if they are using more or less of it in any given act.

A marker has now been developed that can identify when attention manifests itself in phenomenal consciousness. It is important that it was developed for three reasons. First, this account can assist analyses of the effect that attention has on phenomenal consciousness overall, and the different mental states in which attention plays a role.

This is the case, as the manifestation of attentional effort within phenomenal consciousness can act as a guide to the instances in which attention can be definitively said to have an effect on certain mental states and on phenomenal consciousness generally. Second, the account developed here can assist neuroscientists and empirical psychologists who seek to explain the underpinnings of the feelings people experience whenever they attend.[338] With it, they have a detailed account of the experience people have of attention, and as such they have a detailed and structured account of the phenomenon that they seek to explain through their research. Finally, and most importantly, this account can open the door to substantive debate concerning how best to characterise the phenomenology of attention within analytic philosophy.

In analytic philosophy, the main consideration of the role of attention within phenomenal consciousness has been concerned with how attention affects the phenomenal properties of visual perception.[339] The phenomenology of attention itself has been largely neglected.[340] Through engaging with this account, and problematising it, analytic philosophers can help to build a better picture of how the phenomenology of attention should be understood. This is an important task to achieve. Attention is something that 'everyone knows' is an important part of their phenomenal experiences. It is something that is worthy of substantive investigation. As such, it is important that this account was developed, given that it can act as one of the first steps towards engaging with the phenomenology of attention meaningfully within analytic philosophy.

[338] For example, see Sarter et al. (2005).
[339] For some examples, see Block, (1995), Chalmers (2004), Macpherson (2006), Nickel (2007), Peacocke (1993), and Tye (2010).
[340] As discussed in this chapter, the only substantive account that has been developed is that provided by Watzl (2010).

Chapter 5: The Importance of Recognising Perspectives

1. Introduction

In this thesis, three different answers have been posed to the question 'what is attention?'. Each of the three answers represents a different perspective that people can have on the mental phenomenon, and each of them is an answer that can be justifiably posed to the question. The first answer is a common-sense answer to the question, and was provided through the folk psychological concept of attention developed in the second chapter. This answer is that:

> Attention is a limited, divisible resource that is used both voluntarily and involuntarily in our mental acts. When it is used in them, it focuses our consciousness on their objects, or their contents, so that we may access, and have the capacity to retain, information about such objects or contents.

The second answer is an empirical answer to the question, and was provided through an analysis of theories of the metaphysics of attention in the third chapter. In this analysis, the theory that was found to best account for attention, and to provide this empirical answer, was Christopher Mole's cognitive unison theory. Succinctly put, the answer provided by this theory is that:

> A case of attention occurs iff a subject is engaged in a personal level activity which is guided by his/her understanding of it, and all of the cognitive processes which provide the means to engage in the activity, so understood, are operating in unison in aid of the activity, and are not being used in any other activity.

The final of the three answers is an experiential answer to the question, and was provided through the account of the phenomenology of attention developed in the fourth chapter. This answer is that:

> Attention is a feeling of directed mental effort. It is the feeling of 'locking on to', 'selecting', 'focusing on', or 'concentrating on' something with phenomenal features, be that a train of thought, a physical object, a smell, a memory, an imagined creature, or any other of the wide variety of things with phenomenal characteristics.

In what follows, the perspectivist approach taken in this thesis in order to understand the nature of attention will be justified. To do this, it will first be established that providing the above accounts of attention and recognising the perspectives on attention out of which they arise, allowed original insights about attention to be developed. Then, the ways in which these accounts are useful to different areas of enquiry will be discussed. Finally, the chapter will conclude through a demonstration of how a perspectivist analysis, like the one given in this thesis, is preferable to alternative analyses that ignore the perspectives through which they describe mental phenomena. It will be argued that people have several different perspectives on mental phenomena, like attention, and that these perspectives need to be recognised when giving an account of them. Given this, the approach to understanding attention in this thesis will be vindicated, as it recognises and accounts for some of the different perspectives that people have on attention – folk, theory, and feeling.

2. Original insights of the three accounts

The three accounts of attention provided in this thesis are all different in important ways. The first account of attention is an account of what non-experts think attention is. This account is constituted by the folk psychological concept of attention. It does not depict what brain mechanisms, if any, are involved in underpinning attention, and does not give an informative account of the experience that people have of attention. Rather, it is an account of attention that is formed out of people's intuitions concerning their own and others' minds. The second account of attention is constituted by the hypotheses of a theory concerning what underpins attention in the brain. This account of attention has its basis in giving an account of how sub-personal processes are responsible for attention as people understand it and experience it to be, in light of the latest empirical evidence. The third description is an account of what attention feels like, when it is utilised. This account of attention has its basis in phenomenal experience, and does not provide substantive insights into the functional role that people attribute to attention, or the neural underpinnings of attention.

Through the above, one can see that the three accounts of attention provided in this thesis are all developed through different perspectives on attention. It will now be demonstrated how providing these accounts, and emphasising the perspectives on attention out of which they arise, has allowed original insights about the nature of the mental phenomenon to be developed.

To begin, the folk psychological account of attention developed in this thesis provides original insights about attention, as it provides a cohesive understanding of the way that non-experts understand attention in their own and others' minds.

This is original simply because there has been no other attempt to give a cohesive account of the way that most people understand attention within their own and others' minds in philosophical discourse. The intuitions that non-experts have about the nature of mental

phenomena seem to have been largely assumed as easily identifiable within philosophy, and they have not received substantive consideration. There have been only a few considered attempts to identify the folk psychological perspective that people have on mental phenomena and develop accounts of such phenomena through this perspective. These few attempts are all focused on beliefs, and on desires, as with Frank Jackson and Phillip Pettit's accounts of the folk psychological concept of belief.[341] With this thesis a gap has been filled, with an account of the way that non-experts understand attention. As such, the account here provides an original and important contribution to philosophy by identifying how most people conceive of attention within themselves and within others.

Alan White's and Gilbert Ryle's accounts of attention are both developed from ordinary language analyses of attention, as the account of the folk psychology of attention provided here is.[342] This may raise some doubt over the whether the folk psychological account of attention developed in this thesis is the first of its kind and is entirely original. However, the authors of these accounts of attention do not explicitly state, or go to any lengths to establish, that their accounts of attention are those that are representative of the way that non-experts understand attention in their own and others' minds. Through identifying that the account of the folk psychology of attention arises from the folk perspective that people have on attention, and identifying in clear terms the nature of this perspective and its constraints, the account here has provided original insights. It is an account that explicitly makes clear how non-experts understand attention, and makes clear the nature and constraints of this understanding (i.e. that folk concepts are communicative tools that should not be taken to pick out brain mechanisms accurately), something which is unique in existing literature.

One might also query the originality of the account of the folk psychology of attention by noting that it provides an account of attention through a perspective on the phenomenon

[341] Jackson and Pettit (1993).
[342] Ryle (1949, p. 141) and White (1964).

that is immediately accessible to everybody, and so it is not original but is simply stating the obvious. This point has already been addressed substantively in the thesis.[343] Non-experts have an intuitive ability to draw upon the folk concept of attention when they communicate with each other, and have an intuitive understanding of what attention is that is based on this concept. However, it is unlikely that non-experts, and perhaps many experts, could provide a clear account of the content of this concept, if asked. The understanding of the folk psychological concept of attention that people have is implicit, and is like the understanding that people have of many grammar rules, in that it is something that they draw upon intuitively when required but cannot easily describe. Moreover, as was seen in the second chapter, the folk concept itself is extremely complex, and to expect that it could be described easily without sustained analysis would be misguided. In sum, through the account of the folk concept of attention in this thesis, the complex, implicit understanding of attention that non-experts have has been made explicit for the first time. As such, through developing the concept the thesis provides an original contribution to philosophical discourse.

In the third chapter, Mole's account of the metaphysics of attention was identified as the best available account of attention. The analysis here did not involve any sustained attempt to develop, or alter the core claims of the theory. As such, it might seem as though in endorsing this account of attention, no original insights about attention were provided. However, as will now be explained, original insights about Mole's theory and about the metaphysics of attention in general have been provided in this thesis.

At both the outset of the thesis[344], and in the third chapter,[345] requirements for theories of the metaphysics of mental phenomena to meet to be considered good theories were identified. The requirements are not only that such theories have to provide accounts of mental phenomena that are consistent with empirical evidence. They also specify that they

[343] See section 2.1 of chapter one and section 7 of chapter two.
[344] See section 2.2 of chapter one.
[345] See section 7 of chapter three.

must have the capacity to explain why non-experts (and people in general) both understand and experience mental phenomena in the way that they do. These requirements are based on the perspective out of which accounts of the metaphysics of mental phenomena arise. Accounts of the metaphysics of mental phenomena, as has been stressed, are accounts that are 'basic even from the point of view of physics'. If they are good accounts, they provide foundational accounts of mental phenomena, based on empirical evidence, that are capable of explaining how all other means of acquaintance with these phenomena come about.

The requirements identified for theories of the metaphysics of mental phenomena to meet may be intuitively recognised in many theories, in that theories may try to explain certain phenomenological features of phenomena, or certain aspects of the way that most people understand them. However, these requirements have never been explicitly stated in the way that they have here. What allowed them to be stated here so clearly was the recognition of the perspective on mental phenomena that accounts of the metaphysics of mental phenomena arise out of. So, the thesis provides original insights about the requirements that theories of the metaphysics of mental phenomena need to meet in order to be considered good theories, and was able to do so as a result of recognising the perspectives on mental phenomena out of which these accounts are developed. As will now be demonstrated, in applying these requirements to Mole's theory, original insights about the explanatory capacity of Mole's theory were developed, and so original insights about the nature of attention were also developed.

In applying the aforementioned requirements to Mole's theory, the capacity of the theory to explain aspects of the experience that people have of attention, and the capacity of the theory to explain different aspects of the folk psychological concept of attention, were identified.[346] The capacity of the theory to explain some of these things was something that

[346] See section 7.1 to section 7.7 of chapter three.

Mole himself did not explicitly describe. These things include the ability of the theory to explain why non-experts conceive of attention as a resource, and explain why people experience attention as a feeling of focus, or concentration, that varies qualitatively in different activities. By doing this, the thesis has helped demonstrate some of the strengths of Mole's theory that have not yet been identified, and in so doing has shown how the theory provides a more comprehensive account of attention than even Mole himself has argued for. In sum, although the account of the metaphysics of attention endorsed here was not original, original insights about the aspects of attention that this theory can explain have been provided.

In the fourth chapter, an account of the phenomenology of attention was created. This account describes the way that attention manifests itself to people in phenomenal experience. Accounts of attention through this phenomenal perspective have been neglected within analytic philosophy. Indeed, Watzl's account is the only clearly identifiable example of an account of the phenomenology of attention.[347] In developing an account of the phenomenology of attention, this thesis has provided one of the first interpretations of what attention feels like to people within phenomenal experience, and the only interpretation that construes attention as a feeling of directed mental effort. In this way, this thesis has provided an original insight into something which has received little consideration. Moreover, the thesis has provided an original contribution to analytic philosophy by helping fill a void where interpretations of the phenomenology of attention should be.

One might query the idea that the account of the phenomenology of attention provides an original contribution to analytic philosophy. They could do so by noting that the phenomenal features of attention are immediately accessible to people and that no considered account of them needs to be provided. This point was addressed early on in the thesis.[348] Although people are aware of the phenomenal characteristics of mental phenomena, like attention, they

[347] Watzl (2010, p. 69).
[348] See section 2.3 of chapter one.

are not aware of them in any structured way. To provide an account of the phenomenology of a mental phenomenon, a considered account must be developed that identifies what is representative of the experience that people have of that phenomenon overall. For example, as was seen with attention, there are feelings that people attribute to attention only in certain instances, such a feeling of difficulty, a feeling that one's attention is drawn to something, and so on. If any of these feelings were taken to be representative of the experience that people have of attention overall then such an account would misrepresent the experience that people have of attention. Given this, developing considered accounts of the phenomenology of mental phenomena like attention is an important task that should not be taken for granted. As such, the account provided here still makes an original contribution to analytic philosophy, given that considered accounts of the phenomenology of attention are sorely lacking within analytic philosophy.

3. Applying the answers

The three different answers posed to the question 'what is attention?' in this thesis have different roles to play in various disciplines. The role that each has to play will now be discussed, starting with the account of the folk psychology of attention that was posed as the common sense answer to the question.

The folk psychological account of attention provided here has two clear uses within philosophy. First, it can be used in the way in which it already has in this thesis, in terms of it being an object of explanation for theories of the metaphysics of attention. This is the case as it is representative of the naïve intuitions that people have about attention, and, as has been argued, mature theories of attention must be able to explain the naïve intuitions that people have about attention if they are to maintain conceptual accuracy.[349] Second, it can be used in a

[349] See section 7 of chapter three.

broader philosophical analysis of folk psychology. The folk psychological account of attention developed here is an account of the folk psychological concept of attention. This concept is one of the set of folk psychological concepts that non-experts draw upon to understand their own and others minds. Through an analysis of this concept, and of others, it can be determined whether folk psychological concepts form part of a cohesive structure of folk concepts, or if they do not and are simply a part of a bundle of different concepts that do not have any cohesive structure, as Morton suggests.[350] Moreover, through an analysis of this concept, and of others, it can be determined if folk psychology should be best considered as a theory, a kind of narrative practice, or as something different entirely. In essence, with the content of this concept, and that of others, the nature of the body of folk psychological information that people draw upon when they communicate with each other may be able to be determined. In this way, the folk psychological account of attention developed here is very useful to a broader analysis of folk psychology.

The folk psychological account of attention provided here also has a role to play in neuroscience, and empirical psychology. This is the case because, as will now be explained, it can help empirical psychologists and neuroscientists identify whether or not 'attention' is a natural kind term.

The reference of the term 'attention' was fixed in the second chapter to identify the folk psychological concept of attention.[351] Empirical psychologists and neuroscientists can utilise this information to identify what people refer to when they use term 'attention' in everyday discourse. Then, through research into the things that people refer to with the term, they can identify what sub-personal processes, if any, constitute attention in the various different instances in which the term is used. If they do enough research, they may be able to identify the extension of the term. If the extension of the term 'attention' is demonstrated by

[350] See Morton (2007).
[351] See section 6.4 of chapter two.

empirical psychologists and neuroscientists to pick out a single sub-personal process that is essential to all instantiations of what people call 'attention', then 'attention' can be considered a natural kind term under an essentialist framework.[352] This would seem unlikely, given that the empirically based account of the metaphysics of attention endorsed in this thesis has been found not to conceive of attention in terms of any one brain mechanism. However, it is a possibility that 'attention' is a natural kind term, and one that research by empirical psychologists and neuroscientists can help identify. Given this, the folk account of attention developed here has some use in both empirical psychology and neuroscience, through being able to assist in the process of determining whether or not 'attention' is a natural kind term. [353]

The folk psychological account of attention has a use in psychology, through being able to help identify how, and when, folk psychological capacities develop in human beings. This is the case, as if the stage of development at which children gain the capacity to use this folk psychological concept is identified, a better understanding of how people come to have a folk psychological apparatus may be achieved. However, this folk account should not be mistaken for something that provides a means to identify when people develop the ability to engage in mindreading. As was stressed in the second chapter, the concepts which people draw upon to engage in mindreading are not folk psychological concepts.[354]

The folk psychological concept of attention identified in this thesis has a similar role to play within developmental linguistics as it does within psychology. Developmental linguistics, broadly construed, is the study of the development of linguistic understanding and ability in children. Developmental linguists can identify when children master the capacity to draw upon the mental term 'attention', through seeing if they have the ability to employ the folk concept developed here, with understanding. Importantly, this kind of research will also

[352] For example, attention would be considered a natural kind term were this the case, under the essentialist accounts of natural kind terms provided by Putnam (1973, 1975) and Kripke (1980).
[353] Interestingly, both Felipe De Brigard and Jesse Prinz argue that 'attention' is a natural kind term. However, they do not draw on any cohesive analysis of the folk psychological concept of attention, like the one developed here, to make this argument. For their account see De Brigard and Prinz (2010) and Prinz (2011, 2012).
[354] See section 3 of chapter two.

allow such linguists to better understand how children develop a crucial linguistic skill, which is the general ability to utilise and understand mental terms. With that, the ways in which the second answer to the question 'what is attention?' can be used in various disciplines will now be described.

The empirical answer to the question 'what is attention?' provided in this thesis is constituted by the account of the metaphysics of attention that has been endorsed here, Mole's cognitive unison theory. One of the ways that Mole's theory can be drawn upon in both empirical psychology and in neuroscience will now be discussed. Then, a way that it can be utilised in philosophical discourse will be identified.

Mole's theory can be used as a framework to identify the sub-personal processes that are involved in attention in different attentive activities, by those who work within empirical psychology, and neuroscience. It can perform this role, as it identifies what an instantiation of attention is, and identifies the requirements for a sub-personal process to meet in order for it to be involved in an instantiation of attention. Armed with this knowledge, empirical psychologists and neuroscientists can assess different activities, see which kinds of sub-personal processes are involved in them, and then determine what kinds of sub-personal processes are involved in cognitive unison in each case. In sum, they can use the cognitive unison theory as the paradigm through which they can identify the sub-personal processes that can, and cannot, be considered to be involved in attention when agents utilise them.

An example of how the cognitive unison theory could be used by psychologists and neuroscientists is in the research of attentive reading. In order to identify the sub-personal processes involved in reading attentively, empirical psychologists and neuroscientists could draw on the cognitive unison theory and assess which types of sub-personal process allow agents to perform the activity with understanding. These processes could only be 'cognitive processes' as Mole defines them, meaning that they must be processes that act upon the

content of the personal level states of an agent in such a way that the agent can form personal level attitudes towards them.[355] Through using the theory, empirical psychologists and neuroscientists may be able to rule out various sub-personal processes as not being part of the attentive performance of the activity, and it may allow them to identify the kinds of sub-personal processes involved in the attentive performance of the activity. Through doing this, a better picture of the kinds of sub-personal processes that agents bring to bear with understanding when they read may be developed by empirical psychologists, and neuroscientists. [356] In this way, Mole's theory is a very useful tool to neuroscientists and empirical psychologists. Ultimately, it can act as the framework through which the sub-personal processes involved in the attentive performance of different activities may be isolated.

Mole has identified the many ways in which his account of attention can be drawn upon in philosophical analysis in his book Attention is Cognitive Unison.[357] In philosophy Mole's account of the metaphysics of attention also has another important role to play. With Mole's theory, the clearest expression of what the fundamental nature of attention can be considered to be is provided. However, it may not be a perfect account, and so it is the role of philosophers to try to improve on the theory in any respect in which it is deficient, in order to develop the clearest, most comprehensive account of the metaphysics of attention possible. With this in hand, the way that the final answer to the question 'what is attention?' is relevant to different fields of investigation will now be discussed.

The experiential answer to the question 'what is attention?' was provided through the account of the phenomenology of attention developed in this thesis. This account is useful to

[355] Mole (2011, pp. 57-58).
[356] It may be the case that different agents utilise different cognitive processes to read attentively, given that the understanding the agents have of reading may differ. This would be an interesting result, and it is something that should be researched. Existing evidence discussed by Prat and Just (2011) seems to suggest that this is the case.
[357] See Mole (2011, pp. 136-170).

those in empirical psychology and neuroscience, as well as to philosophers. The ways in which it is useful will now be identified.

To begin, the account of the phenomenology of attention developed in this thesis can be used by empirical psychologists and neuroscientists. With the account here, they have a description of the various ways that attention manifests itself in experience. In their research they can provide sub-personal explanations for why it manifests itself in experience in these ways. For example, they can provide sub-personal explanations for why attentional effort often feels difficult to maintain, for why it sometimes feels drawn to things, for why it can feel like more or less of it is being invested into a particular activity at a given time, and so on. In essence, the account of the phenomenology of attention that was developed here is useful to those in empirical psychology and neuroscience, as it can provide an object of explanation for their research. This is particularly the case given that the sub-personal explanations provided for the feeling of attentional effort in this thesis were not substantial. In order to supply adequate sub-personal reasons for why attention manifests itself as a feeling of directed mental effort in experience, and has a variety of different characteristics in different cases, significant research by empirical psychologists and neuroscientists is required.

The account of the phenomenology of attention provided here is something that has applications within analytic philosophy, as has been discussed in the fourth chapter. Two of its applications will now be quickly revisited. First, it provides a marker for when attention manifests itself in phenomenal consciousness. In this, it has the capacity to assist analyses of what attention does to phenomenal consciousness overall, and to the different mental states in which it plays a role. This is the case, as analyses that describe the effect that attention has on the phenomenal properties of particular mental states, or phenomenal consciousness generally, will be able to definitively assert that attention is interacting with these things when the

feeling of attentional effort manifests itself in experience.[358] Second, as described in the previous section, the account of attentional effort developed here is one of the first substantive accounts of the phenomenology of attention within analytic philosophy. Through critiquing this account of the phenomenology of attention, and developing new insights concerning the phenomenology of attention, analytic philosophers can help to build the most accurate picture of what attention is like in phenomenal experience.

The differing roles that the three accounts of attention developed in this thesis have to play in various areas of enquiry have now been determined. With this in hand, the importance of having recognised the perspectives on attention through which each of these accounts was developed will now be emphasised.

4. The importance of recognising perspectives when describing mental phenomena

In this thesis three different accounts of the nature of attention have been provided. Each of these accounts is an account of attention that arises from a different perspective that can be had on the phenomenon. Whether or not any of these accounts accurately captures the way that attention should be understood when it is viewed through any of these perspectives is a matter for debate. However, the method of developing independent accounts of attention through the lens of each of these perspectives, as has been done here, should not be a point of debate. People have different perspectives on mental phenomena. Non-experts have an everyday, intuitive understanding of mental phenomena that they draw upon to communicate with each other. People have an understanding of many, but not all, mental phenomena through having direct experience of them. People also have an understanding of mental

[358] This is not to say that attention may interact with these things when it does not manifest itself in phenomenal experience. It is to say that when it does manifest itself in phenomenal experience, one has straightforward evidence that attention is interacting with certain mental states, or phenomenal consciousness, at a given time.

phenomena through reference to the empirical data collected by neuroscientists, and empirical psychologists. These perspectives, although they relate to each other in very important ways, are not the same as each other. In supplying accounts of attention through each of these perspectives, an insight into the different ways in which people can be acquainted with attention has been provided. This perspectivist approach will now be argued to have been the right way to develop an understanding of attention, given the problems that arise when the perspectives that people have on mental phenomena are ignored.

Negative consequences can arise if one ignores the various different perspectives through which one is acquainted with mental phenomena, and attempts to develop accounts of mental phenomena that give direct and unmediated insights into what they are. Three ways in which these consequences can arise, and have arisen in philosophical analysis in the past, will now be discussed. It will be stressed that, in light of these negative consequences, the perspectivist approach taken to understanding attention here was the right way to go about building an understanding of the mental phenomenon.

4.1. The danger of ignoring the folk perspective

A folk psychological account of any mental phenomenon, like the folk psychological account of attention in the second chapter, is quite limited due to the perspective through which the account is developed. Such an account comes solely from the naive intuitions that people have about the nature of that mental phenomenon, and does not come out of any sustained empirical investigation concerning it. It should not be expected to either (i) give a direct picture of the mental phenomenon that is reducible to underlying sub-personal processes, or (ii) show that the mental phenomenon does not exist by giving an irreducible picture. However, if the naive perspective out of which folk psychological accounts arise is not identified and folk accounts are taken to provide sophisticated interpretations of mental

phenomena, people may have either of these two expectations. As will now be established, people have had these two erroneous expectations in philosophical analysis in the past. It will be argued that if the perspective through which folk concepts arise had been identified, these expectations could have been avoided.

For some, folk psychological concepts should pick out phenomena that are reducible to the brain mechanisms that are identified in empirical data, or all mental concepts should be eliminated.[359] This is a false dichotomy that results from a lack of recognition of the perspective through which folk psychological concepts arise, and has plagued philosophical analysis for many years, in debates over eliminativism and reductionism.[360] As has been explained, folk concepts arise from the naive intuitions that non-experts have about mental phenomena. Their primary use is as communicative tools in everyday discourse. Folk psychological concepts are not the tools through which people actually predict and explain behaviour. This process, involved in mindreading, is far more complex, and the concepts that are drawn upon to perform this task far exceed folk psychological concepts in their complexity. Folk psychological concepts do not even provide an informative account of the phenomenology of mental phenomena. Moreover, they are things which may even differ in different societies. Given all of these things, they should not be taken to accurately pick out what mental phenomena are like, and so should not be taken to provide any decisive insights as to whether a given mental phenomenon is reducible to the brain, or if it does not exist at all.

To come to the conclusion that mental phenomena are reducible to brain mechanisms, or that they do not exist, requires that sophisticated accounts of mental phenomena are developed and tested, on the basis of empirical data. If the phenomena that such accounts describe reduce, or do not reduce to the brain, then a reductionist picture of the mind, or

[359] For two notable examples see P. M Churchland (1981, 1988), and P. S Churchland (1986), who think that folk concepts do not describe things that are reducible to mechanisms identified in the empirical data.
[360] See Ramsey (2007), for an account of the debate.

eliminativism, may be genuinely argued for. Folk psychological accounts of mental phenomena do not belong in this debate, and this could have been avoided if the perspective on mental phenomena through which folk concepts arise had been identified in these debates.[361] Fortunately, in this thesis, the aforementioned issue has been avoided through identifying the constraints of the folk concept of attention that has been developed here. It has been recognised as a concept that arises from a naive perspective that people have on attention, one that results from their intuitions, and is not informed by empirical data, and so should not be taken to provide a final or informative account of the nature of attention.

4.2. The danger of ignoring the perspective of metaphysics

Accounts of the metaphysics of any phenomenon are explanans, not explanandum. Their role is to provide an account of a phenomenon that has the capacity to explain as much about it as is possible, such as the way it manifests itself to people in the various different instances in which they encounter it. So, an account of the metaphysics of a mental phenomenon that non-experts are familiar with, and come to experience in their everyday lives should have the capacity to do two things.[362] It should have the capacity to i) explain why non-experts understand that phenomenon in the way that they do, and ii) explain why people experience that phenomenon in the way that they do. If the theory has no capacity to do this, and involves no attempt to do so, then it ignores the empirical perspective through which it describes the phenomenon. The theory, through the use of empirical evidence, provides an account of the underlying nature of a mental phenomenon that non-experts have certain kinds of acquaintance with. If the theory has no capacity to explain this kind of acquaintance, then it

[361] This is the case even if they are part of a false theory. If the folk psychology is a bad theory, this does not mean that the constituents of this theory – beliefs, desires, attention and the like – do not exist. Such mental phenomena could exist, but just be poorly accounted for by the folk theory.
[362] Obviously, this claim only applies if people have basic notions of the phenomenon that is to be explained. There are perfectly acceptable theories that are about things that we are unacquainted with in everyday life.

has no evidence that the phenomenon that it picks out is in any way related to the phenomenon that non-experts are acquainted with.[363]

Some attempts at providing an account of the metaphysics of a mental phenomenon that non-experts are also familiar with, involve no attempt to explain why the phenomenon manifests itself to people in the way that it does. In these cases, a direct and total account of a mental phenomenon is put forward, with no recourse taken to explain the everyday understanding that people have of that phenomenon, or the experience that they have of that thing. One particular example of this is an account of attention by Arien Mack and Irvin Rock in their book Inattentional Blindness.[364] Mack and Rock argue that attention is, by definition:

> The process that brings a stimulus to consciousness. It is, in other words, the process that permits us to notice something.[365]

Mack and Rock provide no concerted attempt to show how this account of attention is related to attention as non-experts understand it.[366] This does not seem to be too problematic on first glance, given that Mack and Rock note, prior to providing this definition of attention, that they will 'try to be clear about what we mean by [attention] rather than engage in a discussion of its deep philosophical meaning'.[367] In this way, it seems their aim is to provide a stipulative definition of the phenomenon that they are exploring in their empirical analysis, and not to account for attention as most people understand it. However, they do seem to want to attempt to account for attention as most people understand it. They begin their book through asking general questions about the nature of attention, and providing phenomenal descriptions of attention that most people would be able to relate to. [368] It seems unlikely that

[363] For two examples of why this is the case, see the beginning of section 7 in chapter three.
[364] Mack and Rock (1998).
[365] Ibid, p. 25.
[366] This is not a critique of Inattentional Blindness as a whole. Throughout the book, Mack and Rock (1998) discuss the phenomenal qualities people experience when they attend, and refer to many of the different features of attention that non-experts are familiar with. This is simply aimed at the initial definition that they provide of the phenomenon, given they never make clear how this phenomenon can be considered as the one that non-experts are familiar with.
[367] Mack and Rock (1998, p. 25)
[368] Ibid, pp. 1-2.

they would do this if they sought to explain things about a kind of attention that people are generally unfamiliar with. This is problematic for their account, as they provide no evidence that the kind of attention that they describe is the same as the mental phenomenon that people are familiar with, and so there is no clear reason to think that the phenomenon that they explore is the same as the one most people are familiar with.

If accounts of the metaphysics of any mental phenomenon are to be about a mental phenomenon that people are acquainted with in their everyday lives, they need some evidence to show that they are describing this phenomenon and that they are not describing something that people are unfamiliar with. This requires at least some attempt to show that they have the capacity to explain certain aspects of the phenomenon as non-experts understand it. Ultimately, such theories are meant to be explanations of the more basic notions that people have of that mental phenomenon, theories which account for the way things seem, and show how reality differs from this. If a theory of the metaphysics of any mental phenomenon does not seek to explain these things, and does not have any capacity to do so, it ignores the perspective through which it accounts for that phenomenon. This perspective is not one of a direct, unmediated access to the nature of the mental phenomenon, and nor can it be. Rather, it is the perspective of having to account for the underlying nature of a mental phenomenon and explaining how, in virtue of this underlying nature, the phenomenon comes to manifest itself to people in the way that it does. If this perspective is ignored then there is no guarantee that the theory describes the phenomenon that it intends to, which is a serious problem for any theory.

In this thesis, the problem that arises in the aforementioned has been avoided through the identification of the theory that best explains both the experience and understanding that non-experts have of attention. In this, it has been recognised that an account of the metaphysics of attention is not just an unmediated, independent account of a mental phenomenon, but rather

one that should explain the more basic means of acquaintance that people have with it. With this, the final way in which ignoring the perspectives that people have on mental phenomena creates problems for philosophical analysis will be discussed.

4.3. The danger of ignoring the perspective of phenomenology

Accounts of the phenomenology of mental phenomena are accounts of how phenomena manifest themselves in experience. They are accounts of how phenomena feel. In this they are only part of the way that the world seems to people, and are not accounts of the way the world fundamentally is, how people's brains are, or of how mental phenomena operate outside of experience. So, accounts of the phenomenology of any mental phenomenon should not be taken to provide an account of the metaphysics of a mental phenomenon. They should not be taken to give a cohesive account of what the intentionality of mental states are like, nor should they be taken to give any clear insight into the functional role which can be attributed to mental phenomena. These aspects of the nature of mental phenomena go beyond phenomenal experience, and so cannot be clearly accounted for by describing something in it. However, if the perspective through which phenomenological accounts of mental phenomena are constrained is ignored, then accounts of the phenomenology of mental phenomena may be mistakenly concluded to provide definitive insights into the fundamental nature of mental phenomena.

In his disjunctivist account of veridical perception, the philosopher Michael Martin seems to make the mistake just described. Martin argues, as a result of the transparency and immediacy of the phenomenal character of veridical perception, that veridical perception, in the most basic sense, should be considered as a mental state in which people are directly presented with objects in the external world.[369] To make this argument he notes that:

[369] Martin (2002).

> In just the case of veridical perception, the experience is a matter of certain objects being presented as just so and in virtue of that, the subject ought to conform their beliefs to how things appear[370]

Leaving out any debate over whether the experience of 'certain objects being presented as just and so' is exclusive to veridical perception, Martin's claim that people should conform their beliefs to how things appear is not acceptable. [371] The way things appear often differs from the way things are. For example, if Martin's claim that people should conform their beliefs to how things appear were accepted, people should believe that colour is a physical property of objects in the external world, simply because it appears to be so in phenomenal experience. As colour has long been known not to be a physical property of objects, this would clearly be an unfortunate result. Ultimately, the phenomenal character of veridical perception should not be held to provide any informative account of what veridical perception is, or does, outside of phenomenal experience, as Martin holds it to. To determine if veridical perception can be considered as a state that directly presents people with objects in the external world (or even if it can really be considered 'veridical'), then empirical research into the kind of sub-personal processes involved in veridical perception is required. This kind of research provides a more accurate perspective on the nature of that phenomenon, one that is not subject to the same limitations as an account of what it is like in phenomenal experience.

Using an account of the phenomenology of any mental phenomenon to provide the basis for an argument concerning what that phenomenon is, or does, in the most basic sense, ignores the perspective that phenomenology provides on the nature of mental phenomena. Phenomenological accounts of mental phenomena are not integral components of mature

[370] Ibid, p. 402.
[371] This is not to say that the conclusion of his argument is false, merely that the reasoning used to arrive at it should not be accepted.

theories of the nature, intentionality, or functional role of any mental phenomenon, and should not be involved in such theories, except as objects of explanation for them. They are merely accounts of the way phenomena manifest themselves to people in their experience. They give no definitive or reliable insights into what that phenomenon is like outside of this experience. This has been recognised in this thesis, through posing the phenomenology of attention as an independent account of attention, and not using it as something which itself gives definitive insights into the role of attention outside of this experience.

4.4. The importance of recognising perspectives

People have different perspectives on mental phenomena. These perspectives have their own limitations, and provide different insights into the nature of these phenomena. If these perspectives and their limitations are recognised, then the relationship that accounts developed through these perspectives have to other fields of enquiry may be meaningfully determined. This was seen earlier in the chapter, when the relevance that the three accounts of attention provided in this thesis have to other fields of enquiry was identified. For example, the folk account of attention was recognised as an account of the mental phenomenon that arises from people's intuitions about what their own and others' minds are like. As a result, it was seen as something that is relevant to those who study how folk psychological capacities within human beings develop, but is not relevant to those who seek a mature theory to utilise as a paradigm through which they can conduct their research concerning attention at the sub-personal level. However, as was seen in this section, if the perspectives that people have on mental phenomena and their limitations are ignored, serious problems can arise.

In giving an account of any mental phenomenon, it is best to recognise the perspective on the phenomenon that the account is developed through, and the limitations in the kind of understanding that the perspective can provide of the phenomenon. This is the case given that,

as has been established, there are serious problems that result from ignoring these perspectives, and there are clear advantages to recognising them. In this thesis, this point has been adhered to. Each account of attention provided in the thesis has been made clear to have been developed through a particular perspective on the phenomenon, with its own set of limitations in understanding it. Through this perspectivist approach, original contributions to philosophical discourse were made, and insights that are valuable to those in other areas of enquiry were provided. With this in hand, the perspectivist approach taken here should be seriously considered by those who seek to develop insights about the nature of any given mental phenomenon. It is an approach that not only recognises that people have different means of acquaintance with mental phenomena, but can provide useful and original insights about them as well.

5. Conclusion

In this chapter, three things have been made clear. First, it was argued that providing three independent accounts of attention, and identifying the perspective on attention out of which each account arose, allowed a variety of original insights about attention to be developed. Second, it has been demonstrated that these three accounts of attention have different roles to play in different disciplines from psychology, to developmental linguistics, to philosophy in general. Third, it was emphasised that recognising the perspectives through which the accounts of attention were developed in this thesis was the right thing to do, given the problems that arise when the perspectives that people have on mental phenomena are ignored. As a result of these three things, the perspectivist approach taken to developing accounts of attention in this thesis has been vindicated. It has been demonstrated that this approach has (i) allowed for a variety of original insights about the nature of attention to be acquired, (ii) allowed for three accounts of attention that are useful to those in a range of different fields to

be developed, and (iii) recognised the fact that people are acquainted with attention through different perspectives on the phenomenon, which each have their own limitations.

To conclude, the question ‘what is attention?’ has been answered in three different ways in this thesis. Each of these three answers is constituted by a description of attention. Attention has been described through reference to the intuitions that non-experts have about attention, through reference to empirical data concerning attention, and through reference to the way that attention is experienced. These three descriptions of attention are not the same as each other, although they do relate to each other in important ways. They are all descriptions of attention as it is seen through three different perspectives that can be had on the phenomenon, perspectives that all provide important insights into understanding what it is. By describing attention through each of these perspectives in this thesis, it is hoped that progress towards clarifying the different ways that people can understand attention has been achieved, and that valuable insights into debates concerning its phenomenology, folk psychology, and metaphysics have been provided.

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