A NOVEL REPLY TO THE KNOWLEDGE ARGUMENT: WIREDU'S VIEW OF QUASI-PHYSICALISM AS A POSITIVE REPLY TO JACKSON

by

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Abstract

In this thesis I offer a novel alternative response to Frank Jackson's (1982, 1986) knowledge argument in support of non-reductive physicalism (NRP). The knowledge argument is framed as an attack on reductive physicalism (RP), as it suggests the possibility that the subjective experience (SE) of an event or phenomenon adds 'real' knowledge to a person's existing knowledge. My novel response aims to enrich the current debate, dominated as it is by Western philosophy of mind, by introducing one specific African concept of mind into the debate. The concept of mind I introduce into the debate, is Kwasi Wiredu's (1987) quasi-physicalist interpretation of the Akan concept of mind. My alternative reply specifically contributes to the debate by changing the negative ability reply to the knowledge argument, framed by Nemirow (1980, 1990) and Lewis (1983, 1988) in Western philosophy of mind, into a positive support for Jackson (1982, 1986) by introducing African voices into the debate. I demonstrate that although the unsolved mind-body problem is presented as an ongoing philosophical issue in Western philosophy, a turn to an African perspective can shine new light on the problem. The novel alternative reply to Jackson's knowledge argument consists of an epistemological argument that subjective experience (SE) adds genuine knowledge to a person's existing knowledge, and a metaphysical argument that subjective experience (SE) is an emergent mental property. These two arguments validate property dualism as well as the knowledge argument.

Key Words

Mind-Body Problem, Knowledge Problem, Non-Reductive Physicalism, Subjective Experience, Knowledge-How, Knowledge-That, Ability Reply.

Introduction

In this thesis, I offer a novel alternative response to Frank Jackson's (1982, 1986) knowledge argument in support of non-reductive physicalism (NRP). The knowledge argument is framed as an attack on reductive physicalism (RP) as it suggests the possibility that subjective experience (SE) of an event or phenomenon adds 'real' knowledge to a person's existing knowledge. My novel response aims to enrich the current debate, dominated as it is by Western philosophy of mind, by introducing one specific African concept of mind into the debate. The concept of mind I am introducing into the debate, is Kwasi Wiredu's (1987) quasi-physicalist interpretation of the Akan concept of mind. My novel alternative reply specifically changes the negative ability reply to the knowledge argument, framed by Lawrence Nemirow (1980, 1990) and David Lewis (1983, 1988) in Western philosophy of mind, into a positive support for Jackson (1982, 1986). Apart from enriching the debate and clarifying some aspects of the established frame of reference for discussing the implications of the knowledge problem for reductive physicalism (RP), the thesis also reflects a concern with the impact of epistemic injustice: a term coined by Miranda Fricker (2007) in her book *Epistemic Injustice: Power and the Ethics of Knowing*, and explored as a key epistemological theme on the quality of knowledge representation and reasoning in the context of the mind-body problem specifically and in Philosophy in general.

The mind-body problem continues to be misconstrued as if it is an issue only in the West; which is a misconception: the mind-body problem is a *human* issue that also concerns various early thinkers in African philosophy, for example Placide Tempels, Alexis Kagame, John S. Mbiti and in recent years thinkers such as Kwasi Wiredu, Safro Kwame, Kwame Gyekye and Didier N. Kaphagawani have added their voices to the mind-body problem. The mind-body problem concerns the nature of the relation between mind and the body; alternatively, the

relation between mental and physical properties. If the distinctiveness of these properties, the mental and physical, and how they are in a kind of relationship (if any), can be understood and described, then the mind-body problem inevitably will be tamed. The issue of how to represent information, explored from a different tradition, can never be overemphasised. It is particularly key that knowledge acquisition, knowledge interaction and knowledge communication be optimised; so that it can be understood and be expressible as part of epistemic just practices of problem solving, and the richest possible discussion on issues that concern all humans becomes sustainable.

My approach in this thesis is thus to bring together two philosophical paradigms to address the knowledge problem. On the one hand, I frame an epistemological (Western) approach, in terms of Paul Snowdon's (2003) challenge to Gilbert Ryle's ideas in chapter two of his famous book *The Concept of Mind* published in 1949; the idea is termed the standard capacity thesis (CT); and, on the other hand, I formulate a metaphysical (African) perspective, based on Kwasi Wiredu's interpretation of the Akan concept of mind, in order to come up with a novel response in support of Jackson' knowledge argument. I apply a disclaimer here, I am not suggesting that African philosophical thinking is only "metaphysical" nor do I want to imply that thinking in the West is only "epistemological". Significantly, the novel reply I suggest, agitates for an engagement between these two sides (on equal terms), and from an entirely new perspective; that is, I seek to emphasise both the epistemological and ontological perspectives. This can only be of benefit for philosophy of mind, because as mentioned above; the mind-body problem is a human problem that needs to be addressed using all possible avenues to solve it.

The structure of presentation of the content of thesis is in six chapters which I present as follows: Chapter one is a descriptive introduction of the mind-body problem, a problem

which is among the central issues in contemporary philosophy of mind. As an ongoing issue, the mind-body problem centres on the issue of fitting subjective experience (mental properties) into the physical world, (considering these are distinct components).

The Chapter is in two main parts: the first part describes René Descartes' efforts in the seventeenth century which marks the beginning of modern philosophy of mind and the modern version of the mind-body problem; this period is now labelled the *Cartesian turn* as it was a turn away from the outdated Aristotelian hegemony. According to Enoch Stumpf and James Fieser,

> Descartes broke with the past and gave philosophy a fresh start […] neither the authority of Aristotle's great reputation nor the authority of the church could suffice to produce the certainty he sought (Stumpf and Fieser 2012: 206).

Similarly, Burwood *et al.* (1999) states "the establishment of this science [Cartesian] required him to initiate a radical break with a largely Aristotelian past" (Burwood *et al*. 1999: 4).

My discussions of the defining aspects of the mind-body debate benefits from Colin McGinn (1999) who urges that we need to use the terms 'mental phenomena' instead of 'mind'. I discuss the two categories of mental phenomena; 1) sensations and 2) propositional attitudes. I then consider two criteria for the mental; the first criterion, in terms of Cartesian conditions (prioritising the mental) and the second, an appeal to intensionality; these are important parts of discussing what the mental is.

The second main part of the Chapter concerns how substances that display distinct features, viz., the mental and the physical come together. In this part, we are confronted with the rise of science, "twentieth-century physics" (Goff 2017: 24), which advocates a unity of our worldview (Braddon-Mitchell and Jackson 1996: 4). For that reason, there is an apparent metaphysical conundrum; to paraphrase, how to explain two kinds of relationships between

the mind (material) and body (immaterial): 1) finding the mental in the physical, and 2) unravelling the mental and physical (McGinn 1982: 16-17; 1999: 17). Having introduced the mind-body problem, I then focus on some main responses in the next Chapter.

In Chapter two, I consider some of the approaches to the mind-body problem; the options are dualism, physicalism, functionalism and idealism. Of these, my focus is on the following fundamental approaches; viz., dualism, physicalism and functionalism. First, dualism: this approach enjoyed rapid success initially but now this view is "discredited" (Braddon-Mitchell and Jackson 1996: 4), and I agree that it has now mostly lost its sparkle at least in the sense of substance dualism; second, physicalism (reductive and non-reductive): a very popular position in contemporary philosophy of mind and considered currently as orthodoxy (Braddon-Mitchell and Jackson 1996: 4) in analytic philosophy, that is, in its non-reductive guise. Lastly, I consider functionalism: a theory about the nature of mental states as functional states (https://www.iep.utm.edu/functism/). This implies that mental states are identified by what they do rather than by what they are 'made of', and there are many approaches in terms of these identifications. Functionalism is non-reductive physicalism (NRP) in a sense as it is a reaction to reductive physicalism (RP), for example, the identity thesis. Functionalism has been the most recent and fashionable major attempt to account for the mind and is currently the "received" view among philosophers of mind and cognitive science (*ibid*.). However, "there are now signs that its popularity is waning" (Maslin 2001: 6). Dualism, physicalism and functionalism are all critically discussed as responses to the mind-body problem.

In discussing dualism, I emphasise only two varieties: substance and property dualism. In discussing physicalism, I look at its two varieties: viz., reductive physicalism (RP) and non-reductive physicalism (NRP) – the latter which I defend in this thesis. I introduce Jackson

(1982; 1986) as a non-reductive physicalist, and, as such, as a property dualist. For functionalism, I will only discuss three strains: 1) machine-state functionalism, 2) psycho-functionalism and 3) analytic functionalism, respectively. I focus particularly on machine state functionalism, a variety of functionalism that has "some affinities (though not an equivalence) with the Akan concept of mind" (Wiredu 2002: 62), however the views are undoubtedly different, as I will show in Chapter five. In the last section of this Chapter, I very briefly point out two examples of anti-physicalist challenges: Jackson's (1982, 1986) knowledge argument, as well as David Chalmers' (1996) conceivability argument. Having set the background, I then focus on the knowledge argument in the next Chapter.

Chapter three introduces the knowledge argument. This Chapter has three sections; in the first section, I situate the debate as a consideration that involves both metaphysical and epistemological descriptions. I discuss the metaphysical obstacles in articulating a reductive physicalist conception of the mind, and I call it *the quadruples metaphysical challenges of physicalism*; which includes the problems of subjective experience, free will, personal identity and intentionality. In the second section, I give a survey of those who have foreshadowed the knowledge argument, limiting myself to C. D. Broad (1925), Herbert Feigl (1958) and Thomas Nagel (1974) who have all outlined what has been dubbed "knowledge intuitions", that is, arguments from 1925 to 1974 forerunning Jackson's formulation of the knowledge argument. In the last section, I introduce the version of the knowledge argument as presented by Frank Jackson (1982, 1986). This leads, in the next Chapter, to a consideration of the different replies to the knowledge argument.

Chapter four falls into two sections: 1) the replies to Jackson's knowledge argument and 2) the counter-arguments to the replies. In section 1), I introduce how the replies to the knowledge problem have been categorised. Here, I have a two-pronged aim; one, to show

how the various replies to Jackson's knowledge argument have been categorised since the eighties; I limit myself here to Robert Van Gulick (1999), Martine Nida-Rumelin (2009) and Philip Goff (2017). The second prong is a systematic revamp of the three clusters of responses to the knowledge argument which I expand into four categorisations. I eventually focus on only two categories of responses: the non-propositional (against Jackson) and propositional (indirectly for Jackson) replies. Here I seek to place the arguments in clearly defined groups that I will discuss in the last section of this Chapter.

In the next section, I turn to a discussion of the counter-objections against the ability hypothesis (as phrased in Nemirow (1990) and Lewis (1988)). Here, I discuss two specific groupings of physicalists with differing viewpoints specifically on the ability reply to knowledge argument. There are 1) those directly in support of Jackson's attack of reductive physicalism, and 2) those who support him indirectly. Having introduced the knowledge argument and the replies to it against the background of the Western conception of the mind-body problem in these first four Chapters, I can finally turn to my proposal to strengthen Jackson's hand by considering a conception of the mind-body problem, specifically a conception of mind, situated in Africa.

In Chapter five, I examine Kwasi Wiredu's (1987) interpretation of the Akan nonsubstance conception of the mind. In this Chapter, my discussion makes a disclaimer on choosing the Akan conception of mind among other cultural groups like; Chewa, Igbo, Yoruba, Shona, Nguni, Luo, and so on. I am not at all implying that the Akan conception is the only African conception of mind or that there is no better example in African philosophy that can *contribute*. My approach is an example that asserts that African philosophy has always had a contribution to make to the mind-body debate, especially now as it has moved beyond the muted voice of the traditional African philosopher (I refer to the squabble of the *unwritten*

philosophy argument)[1]. Wiredu's interpretation of the Akan account of mind is called quasi-physicalism and is a monist approach to the mind-body problem. The Akan concept of mind, according to Wiredu (2002: 62), has some similar/shared characteristics (not an equivalence) with machine-state functionalism. Specifically, quasi-physicalism emerges from within the Akan concept of personhood. My focus on this view is guided by what I perceive to be the potential Wiredu's interpretation has for enriching Western replies to the knowledge argument.

The Chapter has two parts, namely, 1) an overview of the mind-body problem in African philosophy in terms of three examples of approaches to the problem, and 2) a discussion of three examples of African concepts of mind. In the first part, given the Western hegemony in philosophy and a need for some background to the nature of African philosophy, I discuss general historical developments in the mind-body debate in African philosophy. In the second part, drawing from the first part, I discuss three selected accounts of the African conception of personhood (within which the respective accounts of mind are situated); viz., the Yoruba concept of person, then Wiredu's interpretation of the Akan conception of mind (quasi-physicalism) and lastly, I consider Gyekye's interpretation of Akan personhood (dualism). As I conclude this Chapter, I urge that current debates regarding African philosophy must accommodate new perspectives, e.g. Wiredu's work brings new ideas to the well-known

[1] The "*unwritten argument*" is in my view a misrepresentation of the African historical story, since it is presented to enhance the argument that the written is more important or can be taken as more truth as compared to "a body of originally unwritten ideas preserved in oral traditions, customs and usages of people" (Wiredu 1987: 153). It can be pointed out that some form of documenting has existed in several parts of sub-Saharan Africa, e.g. at the amazing Mapungubwe caves ("Hill of the Jackal" – situated in Limpopo province (South Africa), the inspirational Great Zimbabwe monuments (Masvingo, Zimbabwe) from where Gerard Moerdyk (1890-1958) found inspiration for the Old Merensky Library building on the University of Pretoria's Hatfield main campus); "The prominent chevron (or zigzag patterns) visible on the exterior were inspired by Great Zimbabwe motifs, symbolising water and fertility […]" (University of Pretoria Museums: Department of UP arts-Edoardo Villa Museum pamphlet), the calm Sterkfontein Caves (a paleo-anthropologists haven): a series of lime stone caves that are part of the Cradle of Humankind Heritage sites-situated in the North-West province (South Africa), and so on. Like Gyekye, I do not seek to be like some philosophers in the past who were "preoccupied with the vexing conundrums of [written] language as an end in itself, […]" (Gyekye 1997: 4).

knowledge argument, such views have always been present in African philosophy of mind, but have rarely been included in the philosophical debates.

In Chapter six, I then propose a novel alternative reply to Jackson's knowledge argument against reductive physicalism (RP) building on the previous Chapters. I formulate an epistemological directed argument and secondly, a metaphysically inspired argument, to present a fully rounded argument as positive reply to Jackson (1982, 1986). Both arguments seek to show that Jackson's non-reductive physicalism (NRP) is defendable. My arguments focus on turning Nemirow (1980, 1990) and Lewis's (1983, 1988) proposed ability hypothesis, as a negative rejoinder to Jackson, into a positive reply. I seek to position Nemirow and Lewis in two specific ways to argue my claim that their negative response to the knowledge problem, generally known as the ability hypothesis, can be transformed into a positive reply based on a specific reading of the ability reply.

On one side of interpreting the ability hypothesis is, what I will refer to as the Western view, which for my purpose here is dubbed as "epistemological" (with the disclaimer – I am not saying the Western is only epistemological, nor do I imply that the African is only metaphysical) and is cast in terms of the dichotomy between knowledge-how and knowledge-that. To formulate the epistemological sub argument of my novel reply, I consolidate Nemirow (1990) and Lewis's (1988) negative ability reply with Snowdon's (2003) challenge on Ryle's (1949) Capacity Thesis – (CT), which is focused on the familiar know-that and know-how distinction in epistemology. I limit my focus here on developing an argument for claiming why *subjective experience* (SE) is know-how, and, following Snowdon (2003), why it is knowledge.

On the other side is the African view, which, for the purpose at hand, is dubbed as "metaphysical" (again with a disclaimer as above) and focuses on Wiredu's (1987)

interpreted Akan perspective of mind. Wiredu's discussion centres on the translation of the Akan word *adwene* according to which the mind is a cognitive function. The argument is summarised thus: *mind is a function, the function of thinking*. Here, to formulate the metaphysical sub argument of my novel reply, I consider Nemirow (1990) and Lewis (1988) plus / (augmented by) Wiredu's quasi-physicalism. The context is that subjective experience (SE) as a mental state in terms of imagining, remembering and recognising is taken as an ability by Nemirow and Lewis, while Wiredu explains mind as a function of thought emerging from the brain, which, following Nemirow and Lewis, confirms that subjective experience (SE) is a mental function. I then conclude the Chapter with a formulation of my novel reply to Jackson: subjective experience (SE) (diverse mental states e.g. hearing D minor; seeing red; feeling pain, and so on), understood as a cognitive faculty of the mind, which emerges from the physical brain, adds 'real' knowledge to a person's existing knowledge. What I am saying, therefore, is that subjective experience as a cognitive (mental) faculty of the mind, emerging from the brain (the physical), adds substantive knowledge to a person's physically inspired knowledge base, because subjective experience as knowledge-how is knowledge.

Chapter 1: Situating the Knowledge Problem within the Broader Mind-Body Debate in Contemporary Philosophy of Mind

1. Introduction

This Chapter focuses on an introduction to the mind-body problem in order to situate the knowledge problem in contemporary philosophy of mind. This Chapter is descriptive and begins in the modern era of philosophy of mind; an era which is distinctly compartmentalized by Descartes in the seventeenth century; marking a shift away from Scholastic-Aristotelian philosophy. In the Chapter, there are two things that I aim to do; 1) I outline how; since the seventeenth century the mind-body problem has been presented and shaped as an ongoing stubborn issue in Western philosophy; and 2) I offer a brief analysis of the mind-body problem, which is about how that which is mental and that which is physical, causally interact when considering that the two are presented as being completely distinct in nature. Lastly, as part of 2); I briefly discuss two important kinds of issues that are pertinent to the mind-body relation viz., 1) locating the mental in the physical, and 2) separating the mental and the physical (McGinn 1982: 16-17). It is, in fact, the tension between these two ways in which the physical and the mental may be related that creates the mind-body problem (see McGinn 1990). I do not claim that there is consensus on these issues or that we already fully understand them, rather I seek to affirm that we are getting better insight into arguments surrounding the mind-body problem.

One of the central debates in the philosophy of mind over the centuries is the 'mind-body problem' which, in its modern guise, is a side-effect of René Descartes'[2] chief concern, "the

[2] I agree with the assertion that Descartes, more than any other historical figure, was "responsible for the modern conception of mind" (Heil 2004: 16). Burwood *et al.* (1999) has clearly pointed out however that this is not meant to say that "this field of philosophy was born in a vacuum" (Burwood *et al*. 1999: 1) as one can potentially go back to luminaries like Plato, Aristotle, Aquinas, and so on also considering the problem of mind (*ibid*.). According to Markus Gabriel, "Plato was wrong if he believed that we had an immortal soul somehow invisibly governing the actions of the human body. However, if you actually carefully read Plato, let alone Aristotle, it is far from clear that he believed in what the British philosopher Gilbert Ryle (1949) famously derided as "the ghost in the machine" (Gabriel 2017: 11). However, the problem understood in its present form

problem of intellectual certainty" (Stumpf and Fieser 2012: 205). Over the centuries the mind-body problem has consistently been an intractable philosophical issue: the concern is about how to give a satisfactory account of the relation between the mental and the physical? (McGinn 1990: 18). Given the relics of Cartesianism so infused in philosophy of mind: on one side, we are made to think that the mind could not be physical, while on the other side we have those who advocate the idea that it must be physical (*ibid.*). Attempts to explain and reconcile the relationship between the mental and the physical are considered emblematic of the issue and is at the centre of the mind-body problem. The question is, how are meaning, rationality, and conscious experience related to – or how do these 'concepts' arise – a material world, which is devoid of such characteristics? Modern philosophy of mind can therefore be said to be almost exclusively concerned with the mind-body problem.

The formulation of the mind-body problem seems an inadvertent result from Descartes' systematic search for certainty. His enterprise sought to establish a self-evident truth on which our entire system of knowledge could safely be built, in other words at issue was "an objective conception of reality" (Burwood *et al.* 1999: 4). In his search he applied a method that tentatively placed everything previously 'known' as dubitable and then rejecting "anything which admits of the slightest doubt" (*Meditations II* in Rosenthal 1991: 21) as an unsuitable basis of our knowledge.

Descartes' project was founded on the valuing of reason, and that valuing as its embedded mark represented the breakaway from the Aristotelian paradigm. The break marked the beginning of modern philosophy. Noteworthy,

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is almost entirely owed especially to Descartes and to some extend some of his contemporaries (Burwood *et al.* 1999: 2); so, for the purposes of this thesis, Descartes' view as a dominant paradigm will be discussed within a specific historical context, as I set out my exploration for a potential solution to the mind-body problem, with its seemingly intractable conundrum of how the mental and physical causally interact. Descartes is therefore credited for giving us both "a classic statement of the issues involved and a particular position, which philosophers have continued to argue for and against" (*ibid.*).

> Although philosophy rarely alters its direction with radical suddenness, there are times when its new concerns and emphases clearly separate it from its immediate past. Such was the case with seventeenth-century Continental rationalism, […] which initiated what is called *modern philosophy* (*author's emphasis* Stumpf and Fieser 2012: 204).

His quest was therefore couched in a method that was first-personal; that is "[…] by the systematic application of doubt he believed he could discover the axiom in the surety of *his* own existence" (Burwood *et al.* 1999: 4, *my italics*). His famous *cogito ergo sum* ('I am thinking, therefore I exist') conclusion, in short the *cogito* inference, encapsulates the surety he sought in problematic terms as this surety was cashed out in terms of a "notoriously not embodied […] self [that is] shorn of corporeal characteristics and recognized human attributes and relations" (*ibid.*), on one side; and on the other side, a body with a secondary and oppositional role to the mind (Burwood *et al.* 1999: 8).

Faced with such a dichotomy, the epistemological project quickly turned into a metaphysical treatise, incorporating the two interrelated epistemic and metaphysical doctrines of Cartesian dualism:

1) *the primacy of the mental*: the only epistemologically secure knowledge we have is knowledge of our own minds; and,
2) *the autonomy of the mental:* the metaphysical doctrine according to which there is no dependency between the mental and the physical– if there is, it is external and contingent (Burwood *et al.* 1999: 5).

Premised on the need for outlining the interrelatedness between these two doctrines; outcomes from Descartes' project became catalytic in changing our understanding of both ourselves and the world around us (*ibid*). The understanding and views of the world became binaries e.g., it is either 0 or 1, physical or mental, subjective conscious experiences or a shared public world of objective facts, and so on, as "the" options. However, such dualistic tendencies accompanying the "new" Cartesian worldview away from the Aristotelian worldview, were quickly met with serious scrutiny on the one hand, and led to the mind-body problem in its modern guise on the other hand. According to Hakob Barseghyan, Nicholas

Overgaard, and Gregory Rupik in their book an *Introduction to History and Philosophy of Science,* an Aristotelian worldview was premised on the number of substances, known as pluralism: the view that there are as many substances as there are types of things in the world, thus for an Aristotelian there is a plurality of substances. For instance,

> lions, tigers, and bears might all amount materially, to being composed of some combination of the elements earth and water, but they are also substantially distinct through their forms of lion-ness, tiger-ness, and bear-ness, respectively (https://ecampusontario.pressbooks.pub/introhps/chapter/chapter-8-cartesian-worldview/).

The takeover by the Cartesian worldview as replacing the Aristotelian worldview was premised, among other motivations, on one of its key metaphysical elements, dualism: the view that says there is not a plurality of substances, but only two independent substances, (extended) matter and (thinking) mind (*ibid.*).

1.1 What are Mental Phenomena?

Before we consider the detail of the mind-body problem, we first need to understand what is meant by the 'mind'. Collin McGinn (1999) has outlined this key aspect that concerns the mind-body debate in its current state in contemporary philosophy of mind. His recommendation is that we replace 'mind' by 'mental phenomena' in debating the mind-body problem (1999: 1-16). The reason for his suggestion is that in his view the notion of a 'mental phenomenon' can be investigated unlike the generalized notion of 'mind'. In the rest of this brief subsection, I offer a quick review of McGinn's (1999) – very sensible – discussion to understand why he thinks the term 'mental phenomena' suggests a better avenue when engaging the debate.

According to McGinn (1999: 6), the core of mental phenomena is "contained a priori in mental concepts: that is to say, mental concepts have depth and suggestiveness" in

themselves. As the result of having depth and suggestiveness, it is "possible and fruitful to conduct a philosophical investigation of their content" (*ibid.*). But then what do we refer to by 'mental concepts'? Philosophers use the term in a specific way: in philosophical usage 'mental concepts' refer to something unique; unique in the sense that they are ascribable in two seemingly very different sorts of circumstances: first-person and third-person ascriptions (*ibid.*). To explain,

> We apply [mental concepts] to ourselves on the strength of our 'inner' awareness of our mental states, as when a person judges of himself that he has a headache; and we apply them to others on the strength of their 'outer' manifestations in behaviour and speech (*ibid.*).

Both ascriptions need to be "integrated into a unitary account" (McGinn 1999: 16). McGinn (1999: 8) divides mental phenomena into two main categories; viz., *sensations* and *propositional attitudes*. The attitudes differ in their nature (*ibid.*).

The first category is *sensations*, 'sense-data', or '*qualia*', the term *qualia* originates from the Latin *qualis* which means "qualitatively constituted in some way" (Gabriel 2017: 84); and its singular is *quale*. Gabriel defines *qualia* as "the contents of conscious, purely subjective experiences. They are ways in which we experience things" (*ibid.*). Examples of *qualia* could among others include "impressions of colour, sensations of taste or sensitivity to heat" (*ibid.*).

According to McGinn (1999: 8), by sensations, he means phenomenal states, e.g., "bodily feelings like pains, tickles, nausea, as well as perceptual experiences like seeming to see a red pillar-box, hearing a loud trumpet, tasting a sweet strawberry" (McGinn 1999: 8). A further subdivision of sensations shows that "bodily sensations do not have an intentional object in a way that perceptual experiences do" (*ibid.*). In reference to perceptual experiences, there are two issues i.e., 1) a visual experience, and 2) what something is an experience of, however, in the case of a bodily sensation, like pain, we do not make such distinction. This indicates that

a visual experience gives the view of the world as being shown in a particular way, whilst pains have no such representational content (McGinn 1999: 8-9).

However, let me hasten to say, despite having several subdivisions, the taxonomy of the category of sensations is bound by something special that both bodily and perceptual sensations share, "they are both defined by their phenomenology, that is, by how they *seem* to the subject" (McGinn 1999: 9)[3]. To rephrase, they have a 'qualitative content', so undergoing a sensation "is a matter of what it is *like* for the subject of the sensation" (*ibid.*).

The second category consists of those mental phenomena that have propositional content, that is, the ascription of which involves the use of embedded 'that'-clauses (*ibid.*), as in 'Keisha believes that it is going to rain'. *Propositional attitudes* are commonly referred to as 'intentional states' (Braddon-Mitchell and Jackson 1996: 162) or non-sensational states that are provided by cognitive states (understanding and thinking) and conative states (directly or indirectly concerns willing, trying, intending and so on) (Maslin 2001: 10). Thus, similar to *sensations*, propositional attitudes also have subdivisions, especially since they are endowed with propositional content. Accordingly, for propositional attitudes, we do not only include "cognitive states like beliefs but also conative and affective attitudes" (McGinn 1999: 9.), e.g. desiring or intending that you get a watermelon, and fearing that you will be run over if you jaywalk.

A propositional attitude, of the kinds I have just described, can be identified by two factors, viz., first, the type of attitude it is, e.g.; believing, hoping, fearing, intending, and so on; and second, the proposition onto which the attitude is directed (*ibid.*). Notably, a propositional attitude is *about* what the relevant proposition is directed towards (Braddon-Mitchell and

[3] See Samuel Guttenplan (1995) *A Blackwell Companions to Philosophy: A Companion to the Philosophy of Mind*, (ed.): Guttenplan clearly explains the sense of 'phenomenology' outlined here," […] if you investigate what appears to us when we perceive the world rather than the world that so appears …" (1995: 471).

Jackson 1996: 162). The 'aboutness' alluded to in the examples above, or any other proposition for that matter, is not at all dependent on the existence of what it is about (*ibid.*)[4] e.g. 'I like fairies' is a proposition.

Thus, although there are similarities between propositional attitudes and sensations, there are also differences between the two categories of mental phenomena, primarily, each is defined by its own distinctive phenomenology, but they are integral to each other (McGinn 1999: 9). The taxonomy of categorising mental phenomena that I have dealt with above is not meant to be understood as highlighting exclusivity between the two main categories so that it becomes the case that a given mental state has just the one set of characteristics. That would be an incorrect evaluation of the taxonomy.

Looking at the categories inquisitively, it turns out that some mental states have both sensational and propositional aspects. We can therefore emphasise that "the nature of mental phenomena directs us to regard [the] different perspectives as primary in respect of the two mental categories" (*ibid.*). Let us consider the following examples that I have adapted; 1) seeing that it is gloomy or 2) being petrified that you will be called upon in a lecture to give an answer (*ibid.*). In these instances,

> […] these mental states have both sensational and propositional aspects, [consequently they] are identified both phenomenologically and by way of the propositions to which they are related (*ibid.*).

So, as I wrap up the discussion of what mental phenomena are; two important things apropos to the taxonomy of mental states should be noted accordingly (McGinn 1999: 9-10):

1) […] they are really compound mental states made up of sensation and a propositional attitude in combination.

[4] See Chapter three, section 3.2.4, where I discuss Brentano's thesis, popularly known as Intentionality.

2) […] the taxonomy classifies mental f*eatures*, not mental states...

Going back to the initial attempt at answering the question; what is it to be mental? There are two criteria that can be deployed: the first criterion, appeals to what Kathleen Wilkes (1990) termed 'Cartesian conditions'; "the mind is conscious, that which we are immediately aware, that where we have privileged access, that about which we are incorrigible" (Wilkes 1990: 65). This takes us to the Cartesian dualist features as highlighting the "*epistemological* aspects of the mental states" (*ibid.*) and can be applied for such phenomena "as pains and other sensations, thoughts that 'run through the head', mental performances like visualizing or calculating" (*ibid.*). Unfortunately, these as features of the mental flatly fail for most dispositional ascriptions that in themselves seem to be 'mental', e.g. beliefs or prejudices- say, the glass is fragile or Kelvin is brusque; such ascriptions "fail *ex hypothesis* for any postulate of pre-, sub-, or unconscious mental phenomena" (Wilkes 1990: 65-66).

For Wilkes (*ibid.*), the second criterion, namely the 'aboutness' of these attitudes, also pointed out by McGinn (1991) as the second feature of propositional attitudes, supplements the first one by appealing to intensionality (a feature of certain logical and linguistic contexts). According to Tim Crane, a linguistic or logical context is intensional when it is non-extensional (Crane 2003: 32). An extensional context is one of which the following principles are true:

a) The principle of intersubstitutivity of co-referring expressions[5];
b) The principle of existential generalisation (*ibid.*).

The idea in **a**) is that if an object has two names, F and C, and you say something true about it using C, you cannot turn this truth into a falsehood by replacing C with F (Crane 2003: 33). For a moment let us think of the famous English writer George Orwell whose original name

[5] Sometimes called the principle of 'substitutivity *salva veritate*' – literally, 'saving truth'. (Crane 2003: 33).

was Eric Arthur Blair. A true statement like, 1) George Orwell wrote *1984* cannot become a falsehood by substituting Eric Arthur Blair for George Orwell (*ibid.*). The reason being the statement 2) Eric Arthur Blair wrote *1984* is as true as statement 1). The terms 'George Orwell' and 'Eric Arthur Blair' are co-referential: that is, they refer to the same object: the famous British novelist. Consequently, we can draw from principle **a**) that it stipulates that it is possible to have two terms substituted without a change in the truth or falsehood of the sentence they occur (*ibid.*).

The other mark of the extensional context **b**) is 'existential generalisation': which is a principle that says "we can infer that something exists from a statement made about it" (Crane 2003: 34). For example, from the statement: **c**) "Orwell wrote *1984*", we can infer that **d**) "there exists someone who wrote *1984*" (*ibid.*). This would mean if statement **c**) is true, then statement **d**) is also true. Of course, extensional generalisations can fail when we refer to "statements about beliefs" (*ibid.*), I will not go into the issues of why it fails; those are concerns in philosophy of language.

However, I will just point out that when applied to mental states, there is an accusation against intensionality that it "allows in mental phenomena that are *not* conscious" e.g., pain and other bodily sensations (Wilkes 1990: 66). Wilkes (1990) believes that "arguably it lets in too much" (*ibid.*), an example in computer science and neuroscience is where there is widespread use of intensional terminology in describing the "functioning of the systems they study – e.g., 'information' is a notion laden with intensionality" (*ibid.*).

I have explored McGinn's (1999) recommendation on using the term 'mental phenomenon' and the accompanying technical understanding of the main categories of mental phenomena. Having taken a brief survey, I have focused on the question intimated earlier; what do we really mean by the 'mental' as contrasted to the 'physical'? As is generally accepted, it is

however perhaps not really the important question; rather, the important question is regarding relatedness: how do the mental and the physical interact? This brings us to a discussion of the mind-body problem itself in more detail.

1.2. The Mind-Body problem

Brian Cooney in the introduction of his book, *The Place of Mind*, raises an important Cartesian question:

> Am I some nonphysical place (a mind or consciousness) *in addition* to being a body that takes up physical space? If so, how do these two ingredients of me relate to each other? (Cooney 2000: 1)

These are puzzling questions; how can the mental relate to that which is physical? In a nutshell, these questions represent and "express the dilemma which [still] confronts us" (Campbell 1970: 14). The philosophy of mind, religion, neuroscience, computer science, and artificial intelligence (AI), and so on, are among the interdisciplinary efforts that are continuing the search for good answers to these Cartesian questions.

The questioning of the relation between the physical states of the body; specifically, the brain, on the one hand, and mental phenomena on the other; continues to actually ferment a perplexing dichotomous issue (McGinn 1999: 17). In Descartes's words,

> […], I am not merely present in my body as a sailor is present in a ship, but … I am very closely joined and, as it were, intermingled with it, so that I and the body form a unit (*Meditations VI* in Cooney 2000: 21).

So, in brief, the mind-body issue is that humans and other beings 'extended in space and time', being describable in physical terms, also display evidence of features that cannot be described in physical terms without some theoretical moves. This is so because, as alluded to above already, these features, escaping physical description, are totally different from

physical ones – e.g. thinking, feeling, deciding, planning, reasoning, and giving meaning to our world.

And, there is an additional problem: There seems to be two kinds of issues to be considered, when we deliberate the relations between body and mind (McGinn 1996:17-18):

1) Locating the mental in the physical: the mind is located in the body; each mind has a characteristic mode of embodiment determined by its sensory abilities; there are causal connections between mental and physical events; the physical brain is related to mental activity.
2) Separating the mental and the physical: 'Subjective experience' (the 'feeling what it is like', 'qualia'), consciousness, subjectivity, infallible first-person knowledge, meaning, rationality, freedom, self-awareness seem somehow separate from physical features (*ibid*.).

To restate and emphasise, the tension between these issues is constitutive and symbolic of that antagonistic relationship that is the central focus of the 'mind-body problem' in contemporary philosophy of mind.

Keith Campbell has pointed out; however, that while we can grasp what is baffling about the mind-body problem (1970: 14), yet, it persists like no other philosophical dilemma, as pointed out earlier. The core unresolved issue is that deep metaphysical conundrum regarding how to explain the two kinds of relationship above, to repeat, 1) locating the mental in the physical, and 2) separating the mental and that which is physical. This brings us then to critiques of some of the most notable responses to the mind-body problem, which I outline in Chapter two.

1.3. Conclusion

In conclusion, in this Chapter, I aimed at two things; 1) a historical descriptive introduction of the mind-body problem, from which I will situate the knowledge problem in coming Chapters. I deliberately began by describing the problem as we presently understand it; which

is a formulation credited to Descartes in the seventeenth century. Descartes' methodic doubt seems to have been foundational for Cartesian dualism; in contemporary philosophy of mind it is generally accepted that Descartes has presented the most explicit form of dualism as a view that posits fundamental reality as a duality of distinct substances (mental and physical).

I then considered a brief paraphrasing of McGinn's (1999) question: Of what nature is the mind?" In this section, I discussed McGinn's recommendation of characterising 'mental phenomena'; as a viable avenue for investigating the 'mind'. By following McGinn, I sought an outline of a non-empirical thesis as way of tackling and understanding, incontestably "the character of mind"[6], that is, whether to approach mental phenomena from a "first person or a third person" perspective. Then; 2) I briefly introduced the mind-body relational issue; that is, how the two distinct states, the mental and the physical come together; a lasting legacy from Descartes. Lastly, I highlighted the unresolved issues that turn out to be central in driving the mind-body problem up to this day. This shows that the mind-body problem has stubbornly persisted, and as exemplified by many arguments proposed over the centuries that are motivated by the desire to solve Cartesian dualism, yet it still cannot be put to bed.

In the following Chapter, I will look at the approaches to addressing the mind-body problem: dualism, physicalism, functionalism, and idealism. I organise the Chapter into two main prongs: first, a discussion of dualism, and second, a discussion of both physicalism and functionalism, all of these views being responses to the mind-body problem in contemporary philosophy of mind.

Now, in contemporary philosophy of mind the dominant paradigm is non-reductive physicalism (NRP) and though it is "motivated by some very powerful arguments and a

[6] I would like to call attention to this phrase which is the title of Colin McGinn's (1996). *The Character of Mind: An Introduction to the Philosophy of Mind*, a book which is about "articulating deep difficulties we face in theorizing about the mind".

desire to bring the mind within the purview of a single, non-mentalistic causal explanatory schema" (Burwood *et al*. 1999: 22), it however, still

> requires us to solve a seemingly intractable conundrum […] the mind has certain distinctive features, such as its rationality and subjectivity, which do not allow it to fit neatly with the scientific view of the world […], and yet it has others, such as its causal efficacy, which suggest that it should (*ibid.*).

I discuss these arguments in the next Chapter. Moving on, I also introduce another historical approach to the mind-body problem, namely idealism: "all that exists are ideas and minds" (Guyer and Horstmann 2018: n.p.). I will then return to discuss physicalism by introducing its two varieties; viz., reductive physicalism (RP), and non-reductive physicalism (NRP). In the penultimate section, I then introduce a discussion of Frank Jackson's non-reductive physicalism (NRP), and the final section of the Chapter introduces two specific anti-physicalist challenges:

1) the knowledge argument (Jackson 1982, 1986), and;
2) the conceivability argument (Chalmers 1996).

Chapter 2: Approaches to the Mind-Body problem: Dualism, Physicalism, Functionalism and Idealism

2. Introduction

In the last Chapter, I introduced the mind-body problem, and situated the problem in contemporary philosophy of mind. I began my discussion within the seventeenth century, and described Descartes's systematic search for certainty, which became known as the Cartesian turn. I then introduced what lies at the core of the mind-body problem: the uneasy relationship between the mental and the physical which seeks to be reconciled; the contentious issue being, are mental phenomena a subset of physical phenomena or not, that is the conundrum.

In this Chapter, I will look at various approaches to the mind-body problem in contemporary philosophy of mind. The approaches are motivated by an underlying assumption that progress in neuroscience (current science) can answer conclusively the questions on the nature of reality. Chalmers (1996);

> the best evidence of contemporary science tells us that the physical world is more or less causally closed: for every physical event, there is a physical sufficient cause […] it remains plausible that *physical* events can be explained in physical terms (*author's italics*, Chalmers 1996: 125).

This is an assumption that is not without controversy. The discussion, in this sense, is firmly about how we characterise the real nature of mental (psychological) processes and physical (material) processes, in other words it is an ontological discussion. To start with, there are three basic ontologies of the mind to be considered:

1) dualism: claims the mind and body are distinct, and there are three kinds a) substance dualism, b) idealist dualism and c) property dualism;

2) eliminativism: claims there is no such thing as the mind, as for eliminativists, the concept of mind is dispensable if cognitive or mental phenomena are correctly explained by eliminating references to the mind and speaking instead of behaviour, brain events, and information processing; and
3)) reductionism: which is anti-mentalistic, but does not necessarily directly deny the existence of the mental, as it maintains that whatever is expressed in mentalistic terms can be expressed equivalently and more effectively and economically in a non-mentalistic vocabulary.

In this thesis, I place my focus on the currently favourite paradigm which is materialist and come in a reductionist and a non-reductionist guise; a paradigm that is in *prima facie* opposition to Cartesian concepts of mind (implying an immaterial substance and its relation to the physical world).

The Chapter has three main prongs: in the first prong, I critically discuss dualism; in the second prong, I critically discuss physicalism; and lastly, I give a critical outline of functionalism. I also briefly look at idealism, (an inverse to physicalism), as another (currently less popular) approach to the mind-body problem. All these views are fundamental responses to the mind-body problem.

In terms of dualism, I am clearly aware of a distinction among dualisms, specifically between substance dualism and property dualism, as I will show in my discussion below. And in the context of the aim of my thesis, I also provide an elaborate exploration of the two varieties of physicalism: reductive physicalism (RP) and non-reductive physicalism (NRP). Subsequent to the introduction of (RP) and (NRP), I then discuss Frank Jackson's non-reductive physicalism (NRP). In terms of functionalism, I provide a brief discussion of three varieties of the doctrine: machine-state functionalism, analytic functionalism and psycho-

functionalism. According to Wiredu the Akan provide a machine state functionalist perspective, and I will come back to this in Chapter five. The final section of this Chapter introduces two specific anti-physicalist challenges to reductive physicalism (RP): 1) the knowledge argument (Jackson 1982, 1986) – further unpacked in subsequent chapters, and 2) the conceivability argument (Chalmers 1996).

The mind-body problem has given rise to a variety of approaches that attempts to respond to the challenges it has continued to pose, over the centuries. The approaches have generally been classified as dualistic and monistic – physicalist and idealistic – as already pointed out. There are two important assumptions that inform the approaches to the mind-body problem at particular epochs;

1) what informs the understanding of the problem, and;
2) definitions of the nature of the physical influencing either *dualists* or *monists* of the time, in other words "the science of the time" (Goff 2017: 24) (see also e.g. Burwood *et al*. 1999: 7).

Such assumptions inform and shape the dominant paradigm of the day and consequently; the subsequent responses cannot be immune from such influences. Thus, the attempts to solve that relationary tension arising from the two realms (the relatedness of the mental and the physical) and how they manifest their natures, have consequently led to the conceptual categorisation of these attempts as either dualistic or monistic.

Dualism and monism offer divergent arguments on what really constitutes the nature of reality, and as a result they perpetuate an impasse that arises from our quest to understand how substances with different natures relate. Idealists make a monist claim, namely that there are only immaterial ideas in the mind. The idealist view is that "only mind really exists and that matter is an illusion" (Lycan 1999:3). Advocates for idealism date back to include Plato, Berkeley, Kant, Fichte, Schelling, Hegel, and others. Note; there are different kinds of

idealism, e.g. Berkeley's idealism is very subjective, while Kant proposed an objective kind of idealism[7]. I will not focus on idealism more here, as it does not hold a lot of sway in contemporary philosophy of mind, specifically, perhaps because it avoids the clash between the mental and the physical altogether by denying the existence of mind-independent matter (Goff 2017: 1).

Cartesian dualists, on the one hand, suggest two realms of nature viz., the mental and the physical; and these on a common-sense basis seem incongruous. Another kind of monist approach is the response to the mind-body problem historically suggested by materialists, and in contemporary times, by physicalists; physicalists suggest the existence of one realm, the physical. In a capsule, physicalism states that all mental properties (sensations, thoughts, ideas, all experiences, and so on) are really physical properties.

I concur with McGinn (1999) that on the one hand, dualism is driven to desperate manoeuvres in seeking to relate the mind back to the physical world from which, since the Cartesian turn, it has been excluded; while, on the other hand, "monism is forced to deny or distort the distinctive characteristics of the mind" (McGinn 1999: 19) as it explicates how "the mental and the physical" form one realm of nature. In focusing on these two divergent perspectives on how the mind-body problem have been approached and attempted explanation have been based on; I intend to especially highlight two issues; 1) *the issue of relatedness*, between the mental and the physical as the central problem, and 2) that my focus

[7] According to Guyer and Horstmann (2018), within modern philosophy there are "two fundamental conceptions of idealism: 1) something mental (the mind, spirit, reason, will) is the ultimate foundation of all reality, or even exhaustive of reality, and 2) although the existence of something independent of the mind is conceded, everything that we can know about the mind-independent "reality" is held to be so permeated by the creative, formative, or constructive activities of the mind (of some kind or other) that all claims to knowledge must be considered, in some sense, to be a form of self-knowledge" (Guyer and Horstmann 2018 https://plato.stanford.edu/entries/idealism/). In 1) they call it "metaphysical" or "ontological idealism", in 2) they call it "formal" or "epistemological idealism". I briefly discuss metaphysical idealism, which has its roots in the work of George Berkeley in the 18th century. (The distinction that I have outlined here is not novel (*ibid*.), it was only clearly formulated in the 19th century by Josiah Royce.)

is on these two approaches to the mind-body problem, considering the context of this thesis, which is the knowledge argument proposed as a response against reductive physicalism (RP).

Dualism, principally because of the causal problem, is now an out of favour concept, since;

> […] it frustrates our intellectual thirst for unity by forever splitting the world into irreconcilable domains. It seems to make unintelligible the interaction we regularly experience in ourselves between thought and action, between events "out there" and the sensations or feelings arising "in us" (Cooney 2000: 2).

I will however in the next sections afford space and time to assess it historically, since the doctrine has had significant positive and negative influence in philosophy of mind. Dualism is either as negative as substance dualism or as positive as property dualism. As for materialist monist approaches to the problem, these are either in the form of physicalism or functionalism (as a version of non-reductive physicalism).

Physicalism, in its basic form, is a thesis advocating for the view that everything that exists in the world is physical, hence there is nothing outside of that with physical properties. Physicalism is either reductive physicalism (RP) or non-reductive physicalism (NRP). My focus here will be on non-reductive physicalism (NRP) which is as a contemporary "upgrade" of materialism, as there is general agreement in current philosophy of mind that in it (physicalism in its non-reductive version) lies a viable solution to the mind-body problem, and also again given the focus of my thesis.

Functionalism as a philosophical theory of mind is a view "which claims that the mind should be conceived as a *functional system*" (Cooney 2000: 5). An elaborate definition is provided by McGinn (1999),

> functionalism can be seen as an attempt to explain how mental properties supervene on physical states of the brain: a given brain state will determine a mental property if and only if the brain state has the causal role definitive of the supervening mental property (McGinn 1999: 36).

A quick review of these doctrines (dualism, physicalism and functionalism) as the primary responses to the mind-body problem in philosophy of mind shows several approaches that have emanated from them. These include at least epiphenomenalists (a form of property dualism), occasionalists (a form of substance dualism), Gestalt-shifters (monist), qualia-seekers (monist), substance dualists and property dualists (dualist), and even those for whom the problem is just plain 'hard', according to David Papineau in an interview (6 June 2014) with Joe Gelonesi[8]. Let us now focus on a critical discussion of the two primary doctrines.

2.1. The main responses to the Mind-Body problem

In philosophy of mind, as pointed out above, the responses to the mind-body problem fit in the two conceptual categories; dualism and monism. I will discuss substance dualism as an example of dualistic views, physicalism and functionalism as examples of monistic views. Property dualism is, in a sense a special case of or interface between both reductive physicalism (RP) and substance dualism, will be discussed in section 2.1.2.

Let us first consider how to define the notion of substance.

> A substance […] is an entity which persists through change, is the bearer of properties or attributes, and is capable of independent existence. To say then that minds and bodies are distinct substances is at least to say that minds and bodies are capable of independent existence; i.e. existence independent of each other, and of other things of the same kind (Crane 2000: 73).

Thus, a substance has independent existence, with its own properties. Put in a nutshell, substance dualism is a most basic variety of dualism that holds that there are two fundamentally different types of substances – *physical* substances (bodies) or *mental* substances (minds) (*author's emphasis ibid.*: 74). Substance dualism is also referred to as

[8] He is a presenter of *The Philosopher's Zone* an Australasian ABC radio program since 2013.

"Cartesian dualism"[9], given that Descartes is the modern father of this approach, and confirms that minds do not depend on bodies in order to exist, that is, minds can exist separately from any physical body (Heil 2004: 17). In this form of dualism, the body seems to be, or is portrayed as subsidiary; actually, it is almost "forgotten and invisible in the debate" (Burwood *et al.* 1999: 8). Yet the existence of two substances that are ontologically distinct is primarily the basis of substance dualism (Calef 2005: n.p.).

The word 'ontological' is derived from the Greek word "ontos" meaning "being" or "existence", it denotes the study of the kinds (in a broad, categorical sense) of things that exist, i.e. ontology (Cooney 2000: 497). In philosophy of mind, the debate about the nature of fundamental reality as existing persists: on one side, there is substance dualism which asserts two radically different sorts of existing substances, the mental and the physical; and on the other side, [ontological] materialism – a view that only matter exists and that the distinction between the mental and physical is a product of material interaction (*ibid*.).

As the inverse of dualism, monism (as materialism) asserts that there is only one kind of substance that exists. For substance dualists then, the mind is something over and above the brain, thus two independent realms of nature exist as stated above. For the materialist or the physicalist however, the mind simply is what the brain does; meaning there is only one realm: viz., the physical. David Chalmers (2002) summarises succinctly the two responses, on the one end are the *dualist* views that hold that "mental states are fundamentally distinct from physical states" (Chalmers 2002: 1), while on the other end are *materialist* views that espouse that "mental states are derivative on physical states" (*ibid.*).

[9] For a detailed discussion (history of dualism; varieties of dualism; arguments for dualism and problems for dualism) refer to Robinson, Howard, "Dualism", *The Stanford Encyclopaedia of Philosophy* (Fall 2017 Edition), Edward N. Zalta (ed.), forthcoming URL = <https://plato.stanford.edu/archives/fall2017/entries/dualism/>.

In the next three sections, I will now go into some detail as I discuss these three main responses to the mind-body problem that I have decided to focus on; viz., dualism, physicalism and functionalism. In the first part, I begin by outlining the arguments for dualism: a doctrine that although out of favour now, it still is quite a dominant and influential paradigm post the seventeenth century. In the second and third parts, I go into a discussion of the monistic doctrines, physicalism and functionalism. The penultimate section is a discussion of property dualism as a special variation of non-reductive physicalism (NRP), as this is the view that Jackson supports[10]. And I will end the chapter by introducing two anti-physicalist responses, the knowledge argument and the conceivability argument.

2.1.1. Dualism

The seventeenth century, which was a mechanistic period[11] greatly influenced Descartes[12]. It was a momentous period in contemporary philosophy as it saw the (re-)birth of issues that have become core to contemporary philosophy of mind, e.g. the mind-body problem, the problem of mental causality, etc. As paraphrased by Cooney (2000: 11), the main Cartesian questions posed were "Are minds and bodies distinct? If so, how do they interact?" Or, in John Heil's words, "what accounts for the apparent fact that the mental and material domains are so tightly *coordinated*?" (Heil 2004: 755). These questions exemplify the core of the issues inspired by the Cartesian turn. Underlying the Cartesian period, was the championing of reason (rationalism). For instance, as rationalists, Descartes (reality consists of two substances; thought and extended things - dualism), as well as Spinoza (there is only a single substance – monism), and Leibniz (there are different kinds of elemental substances which

[10] Refer to section 2.3
[11] The philosophical view of that period was "all of states of physical bodies are explicable by adverting only to the mechanical affections of material things: the size, shapes, and motions of their parts". (This is the payoff of the Cartesian claim that the essence of body is extension) (McCann 1994: 341)
[12] Modern philosophy was "not born into a vacuum in the middle of that century" (Burwood *et al* 1999: 1). There is a history that characterized this period, e.g. scientific revolution was gaining momentum then; the publication of Newton's *Mathematical principles of Natural Philosophy* which exemplified the rise of the "scientific method" (Cooney 2000: 2); and so on.

make up the world – pluralism) were influenced by the progress of science (Stumpf and Fieser 2012: 204). They,

> [A]ttempted to provide philosophy with the exactness of mathematics. They set out to formulate clear, rational principles that could be organized into a system of truths from which accurate information about the world could be deduced. They emphasized the rational capacity of the human mind, which they now considered the source of truth about human nature and the world (*ibid.*).

According to McGinn (1999),

> Dualism is the doctrine that mental phenomena inhere in an immaterial substance which is utterly distinct from the material substance composing the body: just as physical states are qualifications of a certain kind of stuff, namely matter, so mental states are qualifications of a different kind of stuff, incorporeal in nature (McGinn 1999: 24).

In order to "clearly" understand the construal of dualism explicated in this definition by McGinn (1999); I will now turn to a retro-assessment of Cartesian substance dualism. I look at two examples of arguments in the literature in support of substance dualism; that is, arguments for concluding that mental states are distinct from physical states. In other words, here are arguments that clearly show that there are two distinct natures of reality.

First, consider the logical principle referred to as Leibniz's *principle of the indiscernibility of identicals* (PInI): its general form is given as; if $x = y$, then every property of x is a property of y, and vice versa, or in other words, *iff* $X = Y$, whatever holds for X holds also for Y (Platchias 2011: 9-10). The truth of this principle (PInI) is self-evident. However, one of the issues with Leibniz's law is that it is easily conflated with its inverse; the principle which is referred to as the *principle of the identity of indiscernibles*, which states that any two entities that have all of the same properties must be the same thing. I focus on the *principle of the indiscernibility of identicals*. The point here is that in Cartesian terms there is no such identity between the mental and the physical and thus we are dealing with two separate substances.

Second, let's turn to "the Cartesian argument" itself. Descartes, in the *Second Meditation*, hopes to find just a single thing, "however slight, that is certain and unshakeable" (*Meditations II* in Cooney 2000: 14). And, as we know very well, Descartes's conclusion was that,

> […], although you can doubt that you have a body, you cannot doubt that you have a mind; you cannot doubt your own existence. This is because if you are doubting, then you are thinking, and if you are thinking you must exist. It follows, he argued, that you and your body are distinct (Braddon-Mitchell and Jackson 2007: 7).

As a side-effect of his argument, Descartes posits a worldview that "divides nature into two domains, i.e., it projects into the human body a ghostly counterpart of that body" (O'Connor and Robb 2003: 9). Descartes' method of methodic doubt culminated in the conclusion that fundamental reality was to be understood as either material or immaterial, that is, as two distinct substances. To rephrase,

> Some objects, he thought, are material [...] extended objects, occupiers of regions of space. Being square is a way of being extended: the square way. Being tall (or being 2 metres tall) is another way of being extended. Accelerating at a particular rate is yet another way of being extended. And so on for all the properties of material bodies … Mental substances, by contrast, are non-extended, 'thinking' entities. All of their properties are modes of thought. A mental substance – a self – might perceive a tower, fear death, feel pain, or believe in God (Heil 2004: 814),

So, in this way a chasm opened up between the mental and the physical (immaterial and material). This view has been so widely influential that it is sometimes thought of as the common-sense view of the mind (Heil 2004: 16). However, the view, despite its popularity, has its fair share of attackers, hence it faces problems, just to give two examples 1) queerness of the mental if conceived of as non-physical, 2) difficulty of giving an account of the unity of the mind (Robinson 2017: n.p.); in fact, "few philosophers of mind today would describe themselves as Cartesians" (Heil 2004: 16).

Be that as it may, and explaining why it so quickly started falling out of favour, the Cartesian view needs to be understood in the context in which it was written. Let me briefly digress so that I can explain. Descartes's thoughts were partly inspired and shaped by the period[13] he lived in, thus how he defined and understood the nature of reality was a product of the physics of the time; the science of his day (Braddon-Mitchell and Jackson 1996: 93). This invites a challenge in contemporary debates about what really is the nature of the scientific enterprise. For example, what Galileo referred to by 'philosophy' meant "both what we would call philosophy and also natural sciences, which were in his time studied as part of philosophy" (*ibid.*). This is referred to as the period of Scientific Revolution[14] and represents a momentous period for various influential changes to how we understand the world; e.g. 1) modern physics (science) i.e., a new view of nature emerged that replaced the Greek view and 2) how religion was advanced as part of how societies transformed themselves in the seventeenth-century Europe (Cooney 2000: 2).

The Scientific Revolution was a period marked with a kind of obsessive admiration of science, in my view. As a result, science seemed to propagate an intoxicating narrative. For example, it was Alexander Pope in 1728, who penned his admiration for Newton (as the face of scientific conquest):

> Nature and Nature's laws lay hid in night; God said, "Let Newton be," and all was light (quoted in Cooney 2000: 2).

The focus of the 'new science' was on shedding light on what can be observed and can be measured and are expressible in homogenous units of measurement; in other words,

[13] Descartes was inspired by the example of geometry, where theorems are derived from self-evident axioms. There is considerable controversy about this methodology in epistemology, in part inspired by the fact that modern physics suggests that one of the axioms geometers found self-evident is actually false (Braddon-Mitchell and Jackson 2007: 6).
[14] The period from the late seventeenth century, associated with the work of Copernicus, Kepler, and Galileo, and culminating in the publication of Newton's *Principia*. During this period a consensus arose that nature should be studied using the language of mathematics and experimental method.

hypotheses were 1) based on experiment or observation, and 2) expressed in the language of mathematics (Cooney 2000: 2). In the process, the "mental which [is] *non*spatial, *un*observable, and *un*measurable" (*ibid.*) seemed to have been forgotten or to have become less real somehow, by only focussing on its converse, "the physical, which is spatial, observable, and measurable" (*ibid.*). Moreover, the Cartesian thesis that "minds and bodies are distinct substances with no properties in common, [yet] they could nevertheless causally interact" (Heil 2004: 814) became very difficult to comprehend and argue for in age in which,

> Causal interaction among bodies was [viewed as] … the result of material particles colliding in space. This is the 'impact' model of causation (*ibid.*).

And thus, dualism, despite the hype, became a discredited doctrine almost as soon as it was born in its modern guise (Braddon-Mitchell and Jackson 1996: 4; Honderich 2014: 90). The rapid success of the physical sciences since the seventeenth century has also done nothing to prevent dualism remaining left behind to this day, even given some empathy in the work of contemporary philosophers such as Karl Popper.

Another form of dualism, that I only introduce here, is property dualism. I will discuss more on property dualism below when I introduce the distinction between reductive physicalism (RP) and non-reductive physicalism (NRP). Property dualists explain their dualist option in terms of just one kind of substance with two fundamental kinds of property, mental and physical. According to Scott Calef, they claim that,

> mental phenomena are non-physical properties of physical phenomena, but not properties of non-physical substances. Property dualists are committed to the irreducibility of mental phenomena to physical phenomena (https://www.iep.utm.edu/dualism/#H6).

In contemporary philosophy of mind, Thomas Nagel (1974) and Frank Jackson (1982, 1986) advance property dualist arguments. Their arguments arise from the claims that properties such as what-it-feels like to be in pain, the smell of roasted coffee beans, the experience of

seeing a red fire truck, and so on, cannot be reduced to the physical. These mental properties are novel and irreducible. For property dualists, the relationship between the mental and physical is one of supervenience[15] – that is mental properties supervene on the physical ones (Chalmers 1996). In this thesis, though I outline Nagel arguments, I specifically focus on Jackson, as an example of NRP – to be discussed later in this Chapter. Jackson defends property dualism on the basis of the knowledge argument (case of Fred and case of Mary), the inference that even complete physical information cannot be enough to let us know what we know based on phenomenal consciousness; the physical and phenomenal accounts of the nature of reality are different. He takes from both dualism and physicalism for his view[16].

In sum, I have discussed two examples of arguments that support the conclusion that mental states are not physical states; such arguments are classified as arguments for dualism viz., 1) Leibniz's principle of the indiscernibility of identicals, and 2) the Cartesian argument. Arising from the first part of my two-pronged approach to understanding the mind-body problem where I discussed dualism, it is evident that dualism has been influential but it has not provided sufficiently successful arguments to keep itself from falling into disrepute.

In the next part of this section, I will discuss the second prong of the possible replies to the mind-body problem, that is, the two currently prevalent accounts of mind, namely, physicalism and functionalism. Physicalism is the doctrine "generally taken to hold that everything in the world is physical or that there is nothing over and above the physical" (Chalmers 1996: 41). Functionalism is a metaphysical theory of the nature of mind which describes mental states as functional ones because they operate as part of a causal system of inputs and outputs. To explain, for "functionalism a mental property is a functional property

[15] For a detailed discussion on supervenience see section 2.1.3.1
[16] These two views direct Jackson's property dualism. Dualism claims the mental and the physical are distinct properties; and its "competitor" physicalism, the current default position (orthodoxy) in philosophy of mind, claims there is only the physical, but with a duality of properties.

that is a property individuated by means of its functional role" (Burwood *et al.* 1999: 45), and is thus identified by what it does rather than by what it is 'made of,' as pointed out earlier. As already pointed out, pertinent to both physicalism and functionalism, is a monistic account of reality (belief in one substance); a doctrine that is "generally" differentiated from a dualistic view (belief in two distinct substances). I begin with a brief discussion of monism

2.1.2. Monism

Monism refers to the doctrine that originates from the Greek derivative of the word *monas* which means 'one', 'oneness', 'without division', and so on. In its philosophical sense, it designates metaphysical approaches like materialism or physicalism and functionalism, which are approaches to the mind-body problem. These examples hold in common the assertion that there is only one category of stuff or substance in the universe, unlike having two categories in a dualistic sense as in substance dualism; as such, for monists the mind must be an exhibition or form of a (single) fundamental stuff. I have already pointed out that I am focusing here on an exposition of non-reductive physicalism (NRP) given my focus on the knowledge argument; however, I also discuss functionalism in the penultimate section of this chapter. Functionalism is a type of non-reductive physicalism (NRP), which holds that mental states can be characterized solely in terms of non-mental functional properties.

Generally, monism is put across with its inverse as dualism. Let me explain, unlike the dualist arguments noted above in response to the mind-body problem; for the monist argument, the category of substances is all of one kind. In their framework, minds and bodies do not have distinct modes of characterization. Monism comes in two varieties viz., materialism and idealism, as noted earlier. On one side are the materialists who propose a perspective arguing that "everything is material" (Crane 2000:4). For instance, a seventeenth century contemporary of Descartes, Thomas Hobbes, argued for a view that "fundamental reality was

entirely material" (Goff 2017: 24). Hobbes's claim is that "mental states are just particular physical states" (Rosenthal 1991:161). Hobbes's argument as summed up by Rosenthal is as follows;

> […] mental events and bodily motions interact causally; since only bodily motions can cause and be caused by other bodily motions, mental events must themselves be bodily (*ibid.*).

On the other side, are idealists who do not believe that the perspective offered by Hobbes is defendable. As an inverse to materialism, idealists agree that "the physical is reducible to the mental" (O'Connor and Robb 2003: 4), in other words, "everything is mental" (Crane 2000: 4). Idealism is chiefly associated with the 18th century empiricist George Berkeley, who is considered the 'Father of (modern) Idealism'. Berkeley defended the view that "fundamental reality was entirely immaterial" (Goff 2017: 24). In his book, *A Treatise Concerning the Principles of Human Knowledge* (1710), Berkeley, wrote,

> For as to what is said of the absolute existence of unthinking things without any relation to their being perceiv'd, that [is to me] perfectly unintelligible. Their *esse* is *percipi*, nor is it possible they shou'd have any existence, out of the minds or thinking things which perceive them (in Robinson 1998: 44).

For Berkeley, reality consists solely of minds (or spirits) and their ideas. Physical objects for an idealist are merely collections of ideas in the mind (O'Connor and Robb 2003: 9). Idealism has historical importance; but the doctrine has few adherents today (Braddon-Mitchell and Jackson 1996: 4). I will not go into further details about idealism beyond these basic introductory remarks I have made.

Crane (2000) summaries these two divergent perspectives succinctly. He remarks that dualism and monism, within the traditional mind and body debate:

> [H]ave been defined as doctrines about substances in the metaphysical sense: in terms of the separability (or not) of the things which have mental and bodily properties.

> Monism is a denial of dualism; [while] dualism is one way of denying monism (Crane 2000: 75).

Drawing out from the above survey of the two varieties of monism, there are two things that are conspicuous about materialists and idealists; 1) both disagree with dualism (Braddon-Mitchell and Jackson 1996: 4), and 2) both have a reductionist flavour:

> For the materialist, minds and their contents are reduced to material objects and ways material objects are organized. For an idealist, reduction goes the other way: material objects and their properties are reduced to minds and states of mind (Heil 2004: 817)

The notion of reductionism will be further explained in the following sections when I discuss the two varieties of physicalism: reductive physicalism (RP) and non-reductive physicalism (NRP).

In this section, I have briefly introduced the inverse to dualism which is monism; in its two varieties, materialism/physicalism and idealism. Notwithstanding the aforementioned contrast; in contemporary philosophy of mind, dualism is contrasted with materialism rather than idealism. The idealist doctrine has only historical importance and today has very few advocates. I will now briefly introduce materialism as a "precursor" to physicalism[17].

2.1.3. Materialism/ Physicalism

Materialism is a monistic doctrine in metaphysics that goes against both dualism and idealism. The materialist claims that material and mental natures are understood in the same terms, the only difference is where to find the ultimate ingredients (Braddon-Mitchell and Jackson 1996: 3).

Materialism has ancient roots – e.g. Democritus a pre-Socratic philosopher said, "[o]nly atoms and the void exist" (*ibid*.). His claim meant that nothing but atoms and the void exist,

[17] Often the terms materialism and physicalism are used interchangeably. However, there are instance where there are applied with a technical approach in the literature in philosophy of mind; in this thesis I use them as interchangeable.

thus expressing the "idea that diversity is to be explained in terms of a limited number of basic ingredients differently arranged" (*ibid.*).

For proponents of materialism, just like the ancient Democritus, "everything, the mental included, is fully explicable in terms of whatever it is that we need in order to understand material nature" (Braddon-Mitchell and Jackson 1996: 3-4). In that regard, it translates to the view that the orthodoxy materialist has to deny to "that there exists any mental reality of the Cartesian kind – unobservable, unmeasurable, and inaccessible to scientific analysis" (Cooney 2000: 4). Therefore, materialism obviously does not endorse dualism: since for the materialists, the basic ingredients are in essence the same, are physical, and are all we need "to account for the material or physical side natures" (*ibid.*).

At the present time in philosophy of mind, materialism in its modern version is orthodoxy, and is called physicalism (Braddon-Mitchell and Jackson 1996: 4). According to Daniel Stoljar (2016), 'physicalism' is at times known as 'materialism' and in specific instances the two concepts are interchangeable. Nevertheless, Stoljar acknowledges that the concepts have different accounts: "the word 'materialism' is very old, but the word 'physicalism' was introduced into philosophy only in the 1930s by Otto Neurath (1931) and Rudolf Carnap (1959/1932)" [18] (Stoljar 2016: n.p.).

Physicalism comes in two varieties, viz., reductive (RP) and non-reductive physicalism (NRP)[19]. Proponents of these two varieties of physicalism are in agreement that there is one physical substance; but the locus of their disagreement arises from the fact that NRP proponents[20] do not agree that the physical aspect is all there is to mental phenomena whilst RP proponents insist that there is only the physical. NRP is now the more acceptable

[18] Both Otto Neurath and Rudolf Carnap were key members of the Vienna Circle: a group of philosophers, scientists and mathematicians' active in Vienna prior to World War II (see e.g. Stoljar (2015)).
[19] Also, RP and NRP going forward.
[20] NRP proponents are property dualists: they accept a duality of properties.

formulation of the physicalist perspective in contemporary philosophy of mind as I will explain below.

It is interesting that there is agreement on what physicalism is, but there is a lack of agreement on the veracity of what it claims. An example would be the irreducibility of the mental in the mind-body debate; this issue is vigorously contested and relates to what the doctrine espouses: physicalism in its basic formulation advocates for the view that everything that exists in the world is physical. According to Alyssa Ney (2008),

> where to be *physical* is to be countenanced by physics. In other words, physicalism is the view that the world contains just those types of things that physics says it contains (Ney 2008: n.p.).

The preceding notion of the term 'physical' by Ney (2008), as expressed in the sense of everything that exists being physical, is acutely problematic; for example, imagine turquoise green, the economy of a country, the distinctive smell of coffee, electrons, stubbing your toe, and so on? Considering these examples, what does it mean for something to be physical? This question has its roots in the evolving view of materialism into its twentieth century guise ruled by the progress in physical science in elucidating the nature of reality. The issue is that from the view that everything is material, the view evolved into the more accommodating view that everything is physical.

However, defining physicalism with such contested connotations of what the physical represents crosses paths with a puzzle: "Hempel's dilemma", so called in reference to its originator Carl Hempel (1980), who in an article "Comments on Goodman's ways of Worldmaking" writes;

> I would add that the physicalistic claim that the language of physics can serve as a unitary language of science is inherently obscure: The language of what physics is meant? Surely not that of, say, 18th century physics; for it contains terms like 'caloric fluid', whose use is governed by theoretical assumptions now thought false. Nor can

> the language of contemporary physics claim the role of unitary language, since it will no doubt undergo further changes, too. The thesis of physicalism would seem to require a language in which a true theory of all physical phenomena can be formulated. But it is quite unclear what is to be understood here by a physical phenomenon, especially in the context of a doctrine that has taken a determinedly linguistic turn (Hempel 1980: 194-195).

The gist of Hempel's dilemma – related to more complex issues around the use of theoretical terms in the language of physics into which I will not go here as it will take us too far off course – arises when we have to decide what the correct option between the two views of physics are: 1) what is in vogue, or 2) the novelty yet to manifest, which one of the two "horns" of the dilemma is to be adhered to, when we articulate a workable definition? As for the options: 1) accept current physics or 2) look to a futuristic physics as the basis for definition: neither necessarily inspires confidence in physicalism.[21]

Firstly, defining the physical in terms of current physics is not acceptable since we are suspicious that at least parts of current physics are almost certainly false in at least some respects[22], we just need to consider the history of physics to see this[23]. Secondly, how can we be expected to know what future physics will in fact look like?[24] Accordingly, seeking a definition of physicalism by following the two articulated terms, physicalism "becomes a trivial and contentless doctrine" (Prelevic 2017: 491), since if "defined in terms of future, completed physics, physicalism might be true in epistemically possible scenarios in which it is intuitively false" (Ney 2008: 1037).

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[21] Goff (2017: 25) remarks "[W]e ask ourselves […] in our definition of the physical as the subject matter of 'physics': [do] we mean current physics with all its flaws, or perfect completed physics of the far-off future".
[22] Prelevic, D. (2017). "Hempel's Dilemma and research Programmes: Why adding Stances is not a boon". *Organon F* 24 (4), pages 490-491, provides a detailed discussion of Physicalism and Hempel's Dilemma, especially on the tension between ontological and methodological commitments for physicalists.
[23] As Goff (*ibid*.) explains, "Our best theory of the very big (i.e., general relativity) is inconsistent with our best theory of the very small (i.e., quantum mechanics). And the history of past physical theories being superseded by later physical theories gives us reason to suppose that current physics will one day be superseded by some more accurate theory of the universe. If physicalism is the view that fundamental reality is made of the kinds of facts current physics talks about, then physicalism is almost certainty false". Prelević D. (2017). "Hempel's Dilemma and Research Programmes: Why Adding Stances Is Not a Boon." *Organon* F 24 (4) 2017: 487-510: makes exactly the same point, taking from Hempel (1980).
[24] Much has been written about this in the philosophy of science, see for instance Stanford's (2006) *Exceeding our Grasp: Science, History, and the Problem of Unconceived Alternatives*.

Nevertheless, the progress of science has generally resulted in physicalism being adopted by most philosophers as the "prevailing metaphysical doctrine of our time" (Fuhrmann and Telles de Menezes 2014: 162). Underlying its persuasive façade is,

> […] the special role of physics in modern natural science [which] is […], a deeply entrenched working hypothesis of all science. Of course, the special sciences, as well as the humanities, employ carefully attuned "macro-packages" so as to obtain explanations of the phenomena that characterize their specific domains. But these explanations must be capable of fitting into the general physical picture of the world. Explanations in biology, e.g., that would require a violation of the principle of the conservation of energy do not stand a sporting chance of being accepted in the community. Likewise, contemporary historians do not accept explanations by telepathy. They rather prefer leaving events unexplained than to resort to explanations that go beyond what is physically possible. Is this just a fashion or prejudice that will pass away one day? [...] (*ibid.*).

So, I have briefly sought to show the lack of agreement in defining physicalism, but I have also shown that on the other hand, it remains a powerful view in contemporary philosophy of mind. Thus, we will continue to explore it in a little more detail. I will now proceed to what has already been pointed out earlier as the two varieties of physicalism; viz., RP and NRP.

2.1.3.1. Reductive Physicalism (RP) and Non-Reductive Physicalism (NRP)

Barry Loewer (2007) and Dimitrias Platchias (2011) are among many philosophers of mind in recent times who have explained the two varieties of physicalism. The two varieties as pointed out earlier are RP[25], which is perhaps the most well-known variety of physicalism and holds that mental states are identical with physical states; and NRP as the newest version that holds that "all particular objects and events are physical, but that there are mental

[25] David Lewis (1994: 412) calls himself a reductive materialist of mind. I am not convinced by Lewis' preference to stick with materialism rather than to switch to physicalism, he claims it would be pedantry, he prefers to stick with history, emphasising that he "does not want to disown our intellectual ancestors" (1994: 413). He uses the following example, "Imagine a grid of a million tiny spots – pixels – each of which can be made light or dark. When some are light and some are dark, they form a picture, replete with interesting intrinsic gestalt properties. The case evokes reductionist comments. Yes, the picture really does exist. Yes, it really does have those gestalt properties. However, the picture and the properties reduce to the arrangement of light and dark pixels. They are nothing over and above the pixels. They make nothing true that is not made true already by the pixels. They could go unmentioned in an inventory of what these is without rendering that inventory incomplete. And so on. (Lewis 1994: 413-414).

properties not identical to physical properties" (Crane 1999: 547). McGinn (1999) has called NRP a rather weak doctrine: because in his view "it says nothing about how mental and physical properties are to be related once they have been distinguished" (McGinn 1999: 31) which seems a bit unfair given the various debates about supervenience and emergence[26] in contemporary philosophy of mind, but I will return to this. I (as most philosophers do) believe NRP is the acceptable variety of physicalism for the reasons that will become clearer when I discuss the two varieties below.

First, Loewer (2007) outlines the two varieties as follows:

> RP includes the view that every real or as I will say "genuine" property (G-property) that has instances in our world (or any possible world) is identical to a physical G-property, and that every individual is composed out of fundamental physical individuals. … The other variety NRP agrees with RP about individuals but claims that there are G-properties, in particular mental properties, that are not identical to any G-properties (Loewer 2007: 244).

Second, Platchias (2011), who in my view, does a better descriptive job on the two versions of physicalism, explains that for reductive physicalists "there is one kind of substance, physical, and mental properties are *reductively identifiable* with physical properties" (Platchias 2011: 45)[27], whilst for non-reductive physicalists (e.g. property dualists) "there is one kind of substance, physical, but there are *two different kinds of properties*, mental and

[26] See e.g. Clayton, P. (2004). *Mind and Emergence: From Quantum to Consciousness*. In the book Clayton discusses the emergence thesis in thorough detail. He recounts its history; and also explores it as a failed alternative to physicalism and dualism; however, emergence still has a place in discussions regarding various phenomena; from physics to consciousness debates. I discuss emergence in section 3.4.1.

[27] Crane points out that RP is at times referred to as 'type-identity theory' since "it identifies mental and physical particulars or tokens, and it is invariably supplemented by the claim that mental properties, supervene, on physical properties" (Crane 1999: 547). In other words, it is a "claim that holds the view that mental properties and states are primarily, physical properties or states" (Heil 2004: 357). RP is considered (among others by him) an empirical hypothesis, awaiting confirmation by science (Crane 1999: 547). The model for such an identity theory is the identification of properties such as the heat of a gas with the mean kinetic energy of its constituent molecules. Since such an identification is often described as part of the 'reduction' of thermodynamics to statistical mechanics, the parallel claim about the mental is often called a 'reductive' theory of mind, or 'reductive physicalism' (RP) (*ibid.*). However, he points out that other philosophers find RP to be "an excessively bold empirical speculation" (*ibid.*). RP seems to commit to a highly implausible claim that "all creatures who believe that grass is green have one physical property in common—the property which is identical to the belief that grass is green" (*ibid.*).

physical properties" (*ibid*.), and accordingly it is the case "that the former cannot be reduced, defined or explained in terms of the latter" (*ibid.*).

RP reduces the mental to the physical (Burwood *et al.* 1999: 29), hence it is a 'type-identity theory'. To explain,

> [T]he higher-level theory is shown to be derivable from the lower-level theory together with 'bridge laws' asserting the nomic coextensiveness of higher-level theoretical properties of structurally complex entities (Horgan 1995: 472).

Type/type identity theory asserts that "mental properties are real, and mental property-instantiations in humans are physico-chemically explainable, because mental properties are physico-chemical properties" (Horgan 1995: 473). In other words, all mental types are identical to physical types, e.g. "pain" is a type like the "brain state of C-fibre firing" or "water" and "H_2O" as identical. The bridge principles or laws[28] make the appropriate connections. Implied is the argument that;

> [R]eduction of one theory to another requires the derivation of the laws of the reduced theory from those of the reducer, and for this to be possible, terms of the first theory must be appropriately connected via "bridge principles", with the second. And the bridge principles must be either conceptually underwritten as definitions, or else express empirical lawlike correlations (Kim 1989: 34).

Central state materialism or RP (type/type identity) makes a claim that not only implies that my fear of a spider now is identical to some particular (token) brain state – but also that "being of the type or kind 'fear of spiders' is the same as being of some physical type or kind" (Burwood *et al.* 1999: 29); e.g. reductive physicalists include U.C.T. Place (1956)[29] and J.J.C. Smart (1959)[30] who have provide classical statements on type/type identity theory, and others[31]. The claim these classic identity theorists make is that conscious mental states are nothing but certain sorts of brain processes. In contemporary philosophy of mind, this

[28] See Ernest Nagel, *The Structure of Science* (1961) for a detailed discussion on reduction.
[29] "Is consciousness a brain process" (1956).
[30] "Sensations and brain processes" (1959).
[31] See also Herbert Feigl's "The mental and the physical" (1958)

earliest version of identity thesis is no longer agreeable; the majority of materialists (non-reductive physicalists) do not want to be understood as making such a claim.

NRP is also called 'property dualism' or 'token-identity theory' since it "identifies mental and physical particulars or tokens and it is invariably supplemented by the claim that mental properties *supervene* on physical properties" (Crane 1999: 547). As a rubric, NRP covers a range of philosophical positions that meet such descriptions: examples include, anomalous monism[32], functionalism, and physicalism (Horgan 1995: 475). NRP views mental particulars and states as wholly dependent on but nevertheless distinct from, physical particulars and states. The technical term for such a view of relatedness is the supervenience thesis. According to Kim (2003), the supervenience argument was conceived to specifically show the mental and its relationship to the physical: "mental properties turn out to be epiphenomenal, that is, without causal powers of their own" (Kim 2003: 151); also, the thesis therefore,

> [i]s not a mere thesis of covariation between mental and physical properties; it includes a claim of existential dependence of the mental on the physical (*ibid.* 152).

The concept of supervenience, not the word, was first used in the moral sphere as a "means of capturing the relation between moral characteristics of situations and natural ones" (Burwood *et al*. 1999: 35)[33]. Ethical theorists G. E. Moore and R. M. Hare proposed accounts that have contributed in the development of the concept of supervenience.

In 1922, George Edward Moore wrote:

[32] This is a type of property dualism, Donald Davidson (1970) defends this doctrine - see discussion on supervenience below.
[33] That means two situations cannot be equivalent in natural properties and yet consistently be judged as morally distinct. If the natural properties are the same then so must be the moral ones (Burwood *et al.* 1999: 35), e.g., "He hit me and you did not tell him off, so you can't tell me off if I hit him!" (*ibid.*) G. E. Moore, (1922) *Principia Ethica*. Cambridge: Cambridge University Press.

> [I]f a given thing possesses any kind of intrinsic value in a certain degree, then not only must that same thing possess it, under all circumstances, in the same degree, but also anything exactly like it, must, under all circumstances, possess it in exactly the same degree. Or, to put it in the corresponding negative form: it is not possible that of two exactly similar things one should possess it and the other not, or that one should possess it in one degree, and the other in a different one (Moore 1922: 261).

In 1952, Richard Mervyn Hare, introduced "supervenience" as a technical terminology in moral philosophy to relate evaluative/ethical judgements to descriptive judgements:

> First, let us take the characteristic of "good" which has been called its supervenience. Suppose that we say, "St. Francis was a good man." It is logically impossible to say this and maintain at the same time that there might have been another man placed exactly in the same circumstance as St. Francis in this respect only, that he was not a good man. (Hare cited by Kim 1990: 6).

What is clear from Moore (1922) and Hare (1952), as explained by Kim (1990) in his paper "Supervenience as a philosophical concept", is the focus on "the characteristic of moral properties or ethical predicates that has to do their *necessary covariation* with descriptive – non-moral and non-evaluative – properties or predicates" (Kim 1990: 6). The issue is about property covariation: "properties of one kind must covary with properties of another kind in a certain way" (*ibid.*). So, this would seem to imply that mental phenomena are supervenient on physical phenomena and yet not reducible to them.

In 1970, Donald Davidson in his paper "Mental Events" introduced the concept of supervenience in analytic philosophy; specifically, in philosophy of mind, when arguing for token/token identity theory. He was attempting to answer the question regarding how the mental and physical characteristics of token events are related to each other (Burwood *et al.* 1999: 35). For him, it is a "view that mental characteristics are in some sense dependent, or supervenient, on physical characteristics" (Davidson in Rosenthal 1991: 250). Supervenience in this sense,

> […] mean[s] that there cannot be two events alike in all physical respects but differing in some mental respect, or that an object cannot alter in some mental respect without altering in some physical respect (*ibid.*).

In contemporary philosophy of mind, the term is used descriptively; and almost exclusively by philosophers within the analytic tradition to characterise the relation between mental and physical characteristics. In this sense, supervenience;

> Capture[s] the intuition that many people have, … [that] if we were to encounter an atom by atom duplicate of ourselves … we would expect it to have the same kind of psychological characteristics (Burwood *et al.* 1999: 35).

As a concept it has its initial usage in moral philosophy; as a way of capturing,

> […] the relation between moral characteristics of situations and natural ones. Two situations cannot be equivalent in natural properties and yet consistently be judged as morally distinct. (*ibid*.).

Davidson (1970) introduced the concept into philosophy of mind in arguments replying to aspects of token-token identity theory[34] as pointed out earlier. Davidson's view is called anomalous monism, a non-reductive materialistic theory (Fitz and Gumm 2010: 35). According to Steven Yalowitz (2012), it is a theory about the scientific status of psychology, the physical status of mental events and how they are related.

> It claims that psychology cannot be a science like basic physics, in that it cannot in principle yield exceptionless laws for predicting or explaining human thoughts and actions (mental anomalism). It also holds that thoughts and actions must be physical (monism, or token-identity). Thus, according to Anomalous Monism, psychology cannot be reduced to physics, but must nonetheless share a physical ontology (https://plato.stanford.edu/archives/win2014/entries/anomalous-monism/>).

Anomalous monism is "an attempt to preserve materialism without any strong reduction of the mental to the physical" (Chalmers 2002: 7). For Davidson,

[34] Token-token identity is the doctrine that every particular mental event (token) is identical with (or nothing but) some physical event (token) or other. This position can be held without implying that there are any type-type identities between types of mental and types of physical events (Cooney 2000: 499). Type-type identity theory says mental types are identical to physical types. This theory was predominant in philosophy of mind in the 1950 and 1960s, for example "water is H_2O, light is electromagnetic radiation, or that temperature is mean kinetic energy" (Burwood *et al.* 1999: 32).

> any mental event is identical to a physical event, but there are no strict laws that connects mental events to physical events, and there are no strict laws governing events themselves (*ibid.*).

Therefore, Davidson argues that "mental characteristics supervene on physical ones" (Burwood *et al.* 1999: 35). His supervenience does not espouse a kind of metaphysical dualism of properties: a system's physical properties might determine its mental properties, without committing to how they relate (Chalmers 2002: 7). Davidson expresses the weak version of supervenience (Horgan 1993: 567; Fitz and Gumm 2010: 39).

According to Fitz and Gumm, "weak supervenience is Davidson's most sensible option for maintaining the consistency of anomalous monism" (2010: 40). Fitz and Gumm (2010) have pointed out that a panoply of possible understandings of the notion of supervenience has emerged: weak, strong, and global among the varieties (Fitz and Gumm 2010: 39). Horgan (1984) discusses these versions as they are expressed initially in Kim (1984) and includes what he calls the "regional version" of supervenience (1993: 566).

According to Horgan (1993) "weak" supervenience can be expressed as follows;

> Necessarily, if anything has property F in A, there exists a property G in B such that the thing has G, and everything that has G has F (Horgan 1993: 566).

And, "strong" supervenience as,

> Necessarily, if anything has property F in A, there exists a property G in B such that the thing has G, and necessarily everything that has G has F (*ibid*. 567).

The formulation of supervenience is also made in terms of entire possible worlds; what is termed "global" or "worlds" supervenience (Kim 1984: 167). Kim offered global supervenience as an alternative approach to the two other varieties. Global supervenience expands to properties between entire words (Fitz and Gumm 2010:40):

> There are no two physically possible worlds which are exactly alike in all physical respects but different in some other respect (Horgan 1993: 570)

An interesting motivation of the basic idea of supervenience is presented by Horgan (2002), who calls it a determination relation between properties or characteristics of objects:

> properties of type A are supervenient on properties of type B if and only if two objects cannot differ with respect to their A-properties without also differing in their B-properties (Horgan 2002: 150).

McGinn (1999), who rejects the supposition that mental properties are independent of physical properties, also argues for the supervenient thesis, when he writes "that mental properties cannot vary while physical properties are kept constant (McGinn 1999: 32). To exemplify, McGinn states;

> [T]he chemical seems supervenient in this sense on the physical, and the biological on the chemical; and if what we have just said is right, the mental is similarly supervenient on the physical (neurophysiological) (*ibid.*).

Braddon-Mitchell and Jackson (1996), succinctly summarise the supervenience thesis with the claim that the psychological can be fully accounted for in physical terms via application of the notion of supervenience: i.e., "the psychological supervenes on the physical. Exact similarity in physical respects ensures exact similarity in psychological respects" (1996: 16-17). These versions of supervenience are defended strongly in philosophy of mind, especially in accounts that seek to explain relations between mental and the physical, as supervening. However, there are some counter views stating that supervenience is inadequate, e.g. we cannot define physicalism in terms of "a merely modal relationship like supervenience" (Goff 2017: 56), and of course, Kim's famous argument against non-reductive physicalism (NRP) discussed previously.

To encapsulate, supervenience is a claim about the necessity of dependence of the mental on the physical: there can be no difference in mental facts without a difference in some physical

facts. In other words, it is a thesis that describes the dependence "relation between […] physical and mental characteristics" (Burwood *et al.* 1999: 35)[35].

However, despite that the majority of philosophers take NRP as the most acceptable variety of physicalism, there are some influential philosophers, e.g. Jaegwon Kim (1989), who are not so convinced by the claims of NRP, and he argues for some form of reductionism and eliminativism (Kim 1989: 32).

In his paper "The Myth of Nonreductive Materialism" Kim has argued that the prospects for NRP are dim (Kim 1989: 43), hence the upshot of his argument: that NRP is not a stable position (Kim 1989: 47). I do not find Kim's assertion convincing, as I will discuss below, but I feel his position as an argument against NRP is notable, especially in this context where I discuss responses to the mind-body problem.

The basis for Kim's position against NRP (property dualism) stems from the perspective that makes a claim that the following four propositions cannot be all true together: i), ii), iii), and iv) (Platchias 2011: 45). To explain:

i) A mind-body supervenience relation holds.

This is about defining a supervenient relation that is 1) nonreductive – a given domain can be supervenient on another without being reducible to it (Kim 1989: 40); and 2) one of dependence – if a domain supervenes on another, there must be a sturdy sense in which the first is dependent on the second, or the second determines the first (*ibid.*). Kim focuses on "global supervenience" or what he also calls a non-reductive dependency relation (*ibid.*). In his view, global supervenience is consistent with the nomological irreducibility of the mental

[35] See Horgan (1995), *From Supervenience to Superdupervenience: Meeting the Demands of a Material World,* a paper which gives a more detailed overview of the history and usage of the supervenience thesis.

to the physical (*ibid*. 41). Mind-body supervenience is therefore viewed arguably as critical for physicalism.

ii) Mental properties are irreducible to physical properties.

Kim (2003) calls it psychophysical irreducibility: "Mental properties are not reducible to, and are not identical with, physical properties" (Kim 2003: 152). Against substance dualism Kim (2005) believes there is a problem in how the mental can interact with a physical body. The talk of mental that is without spatial location is problematic for spatial relations, especially when considering a relation of contiguity. This is a problematic causal relation which is a move back to the notion of reduction: which has been pointed out to be out of favour (Kim 1989: 31).

iii) Mental properties are causally efficacious.

This third proposition is crucial for nonreductive physicalists since in conjunction with the irreducibility claim, it provides a metaphysical basis for belief in autonomy for autonomous science of cognition and psychology which generates law-based causal explanations of phenomenon in NRP. It is concerned with the status of the irreducibility of mental properties. "Mental properties have causal efficacy – that is, their instantiations can, and do, cause other properties, both mental and physical, to be instantiated" (Kim 2003: 152).

iv) The physical realm is causally closed.

Kim expresses it thus "the causal closure of the physical domain"; this says *any physical event that has a cause at time t has a physical cause at t* (*author's italics* Kim 1989: 43). According to him, tracing a causal ancestry of a physical event, we do not have to go outside the physical domain (*ibid*.). The move is to avoid sliding back to the Cartesian idea;

> [T]hat some physical events have only nonphysical causes, and if this is true there can in principle be no complete and self-sufficient physical theory of the physical domain (*ibid*.).

According to Platchias (2011), Kim's argument is that assuming i) is true, then one cannot consistently hold ii), iii) and iv) (Platchias 2011: 45). The argument that Kim provides is that if mental properties are causally efficacious then either they must be identical to physical properties or there must be widespread overdetermination[36] (*ibid.*). Overdetermination is not an option, so this implies that NRP must either reject ii) mental properties are irreducible to physical properties, or reject iii) mental properties are causally efficacious (*ibid*.). The former will suggest reductionism (mental properties are identical to physical properties) and the latter will suggest epiphenomenalism (the mental has no causal power)[37]. Platchias might have overemphasised his point, by saying, Kim's position is obvious desperation (Platchias 2011:136), but I also think it is difficult to support Kim's reductive view: what he calls "causal physical reductionism" (Kim 2003: 152), "the thesis that any mental property – in fact, a property of any kind – that is causally efficacious must be a physical property or be reducible to physical properties." (*ibid*.); and two years later he calls it "conditional physical reductionism" (Kim 2005: 6), "the thesis that if mental properties are to be causally efficacious, they must be physically reducible […]" (*ibid.*). My position not to support Kim (2003), is based for now on my focus here in this thesis of defending non-reductive physicalism (NRP) in terms of a defence of the knowledge argument.

[36] Overdetermination is also called "asymmetric overdetermination" and generally refers to a state where something has two causes: each of the two causes having an equal claim to being the cause of the effect (Beebee *et al.* 2011: 154). E.g., imagine two children playing with cricket balls, and they throw the ball at a window and they simultaneously go through the pane. Each thrown cricket ball is a distinct event, but both appear as the causes of the window shattering – it not that one caused and the other did not, for they both has as much right as the other to count as a cause. Of the two each is regarded as redundant cause of the window shattering (*ibid.)*. If the first cricket ball had not shattered the pane the other one would have done so, and vice versa.

[37] According to Brandon-Mitchell and Jackson (1996), epiphenomenalism is the doctrine according to which mental properties are causally impotent – they make no difference to what happens. They may themselves have causes, but they do not cause anything. (Braddon-Mitchell and Jackson 1996: 6). As Brian McLaughlin put it, mental phenomena (sensations, beliefs, desires, intentions, and so on) are caused by physical phenomena, but they cannot cause anything (McLaughlin in Guttenplan 1994: 277).

In this section, I briefly explained physicalism in its general form and took note of the two varieties; RP and NRP. I concluded by discussing Kim's position that argues for supervenience, which is against NRP, to reiterate he considers NRP an unstable.

In the penultimate section of this Chapter, I discuss Frank Jackson's variety of physicalism, which is non-reductive and also a form of property dualism. Lastly, in the final part of this section, I will briefly introduce two anti-physicalist challenges to reductive physicalism (RP): Jackson's knowledge argument (Jackson 1982, 1986). He uses two imagined human stories: 1) about Fred, and 2) about Mary). The other challenge is conceivability argument by Chalmers (1996), who focuses on zombies[38].

2.1.3.2. Jackson's Non-Reductive Physicalism (NRP)

To situate my discussion of Jackson's (1982, 1986)[39] NRP[40], I turn to an important issue that Stoljar (2016) proposes in discussing physicalism. For Stoljar a discussion of physicalism should be distinguished into two issues: either as an 'interpretation' issue or as a 'truth' issue. For him the interpretation question is: What does it mean to say that everything is physical? And, the truth question is: Is it true to say that everything is physical? (*ibid.*). Jackson's discussion of physicalism is about the truth question (*ibid.*). He believes phenomenal qualities or properties – the feelings what it is like to experience something, i.e. subjective experience

[38] Chalmers (1996: 94-96), discusses the logical possibility of zombies and he acknowledges Robert Kirk (1974) as having offered an earlier "vivid description of a zombie" (Chalmers 1996: 369). I find Goff (2017) exposition on *zombies* (bodies without minds) rather than *ghosts* (minds without bodies) to be interesting and enlightening. He says the word "zombie" is a technical term and its usage follows two distinct ways 1) philosophical zombies and 2) zombies in Hollywood movies. In Contemporary philosophy of mind, a philosophical zombie is by definition, a physical duplicate of a human that lacks consciousness. You stick a knife in a zombie, and it screams and runs away, but it doesn't actually feel pain. When a zombie crosses the road, it looks both ways waiting for the traffic to stop and then carefully crosses the road, and yet it has no visual or auditory experience of the word around it. Zombies behave just like us, because their bodies and brains are physically just like ours, and yet there is nothing it is like to be a zombie (Goff 2017: 78-79).
[39] Jackson (1982) "Epiphenomenal Qualia"; (1986) "What Mary didn't know" are two articles that I refer to when I discuss his non-reductive physicalism (NRP), that is Jackson as a property dualist.
[40] non-reductive physicalism

– exist, but these are qualities thought to fall outside the physicalist picture; hence he espouses a non-physicalist view of mind.

Jackson (1982, 1986) is called a "modern dualist" because he seems to support that some limited form of dualism must be true (Cooney 2000: 9), however, he does not endorse substance dualism; instead, in his scheme of things only phenomenal properties or 'qualia' are non-physical. Meaning that only some aspects of our mental lives need be non-physical. As explained above, such a doctrine is called property dualism. Property dualism is a kind of mixture of dualism and physicalism in the sense that it, unlike substance dualism, states only matter exists, but does support the view that two categories of properties (mental and physical) exist. Property dualists as such claim that there are two essentially different kinds of *property* out in the world (Robinson 2017: n.p.). Burwood *et al.* (1999: 8) refer to the view as 'modern physicalism' and in many ways a direct "inheritor" of Descartes' work.

The backdrop to the discussion of Jackson's NRP is reductionism, (or in our context, RP). Reductionism is a doctrine that according to Kim (1989) has been past its prime for several years now; it posits the following claim:

> [G]iven two fields of discourse, there is an equivalence of either meaning or reference between statements of the two fields so that anything explicable in terms of one field is explicable in terms of the other […], so for example, heat is reducible to kinetic properties (Burwood *et al.* 1999: 3).

In modern philosophy of mind, specifically in the mind and body discourse; for which this thesis seeks a solution, reductionism is taken to make the claim "[…] that anything explicable in terms of mental entities, attributes, or descriptions is explicable in terms of physical entities, attributes, or descriptions" (*ibid.*). As such the classic reductionist argument would be "we can reduce mental states or their descriptions to physical states or their descriptions […]" (*ibid.*).

In that sense Jackson's NRP argument is a view that is "in contradistinction to Cartesian dualism" (*ibid.*); as it commits to a view of the world that is monistic (the world consists of only one type of thing, material thing) and materialistic, in other words physicalist:

> in the sense that the nature of material is articulated in terms of physical science and scientistic in that it privileges this mode of articulation to the exclusion of all others (*ibid.*).

In "Mind and Illusion" Jackson broadly discusses physicalism as a view that mind is a purely physical part of a purely physical world (Jackson 1998 in Ludlow, Nagasawa, and Stoljar 2004: 421). As I have already pointed out earlier, Jackson is a non-reductive physicalist and a property dualist.

In my view, the role of physics (science) allows physicalism some dominance in the philosophy of mind, since it represent some quasi-stable influence as a truth source: the physical world is understood as referencing the world as an object apt to scientific investigation. However, as I have discussed earlier; the scientific approach, though it can give analysis on assumptions of materialism and universal physical laws, has to be differentiated from philosophy (see e.g. Blakemore 1990: 114-115). Gilbert Harman (1993) states:

> There is no subjective inside to a molecule. Physics does not need to know "what it is like" to be an electron, it is sufficient to understand how an electron function. But, although an objective functional approach is needed in cognitive science, another kind of understanding is also needed [in philosophy of mind] that is neither needed nor available in physics (Harman 1993: 111-112).

In this section, I have introduced Jackson as a non-reductive physicalist and a property dualist. I will now go on a cursory tour of functionalism which is a form of non-reductive physicalism (NRP) and it comes in several varieties.

2.1.4. Functionalism

According to William G. Lycan (1994) recent history in philosophy of mind reflects the start of the development of functionalism to be circa 1960, emerging from early AI theories. Functionalism is one of the major theoretical developments of 20th century analytic philosophy, and provides the conceptual foundations of much work in contemporary cognitive science (Lycan 1994: 317). Generally, it is construed primarily as an alternative to behaviourism[41] and reductive physicalism (RP) such as identity theory, and is a version of non-reductive physicalism (NRP).

As an account of the theory of mind, functionalism is focused on causal properties. Functionalists stress that what is important about mental states is not how they are realised (i.e. as physico-chemical states) in the brain, but — according to David Armstrong and other central state materialists — rather the role they play within the causal system. As one of the prevalent accounts of mind, functionalism comes in many varieties, of which the major strains are, 1) machine state functionalism, 2) psycho-functionalism and 3) analytic functionalism, respectively.

1) Machine state functionalism's development is credited to Hilary Putnam (1960, 1967), who proposed a thesis that responded to difficulties arising in both behaviourism and identity theory (Chalmers 2002: 5). In his article "The Nature of mental states", Putnam (1967) puts forward the thesis that mental states are functional states, and that the mind may, in this context, be thought of as a *Turing machine*, an abstract computational machine (1967: 54). According to Hoy and Oaklander (1991), the crux of Putnam's argument is that mental states can be characterised functionally independent of their actual constitution and that what makes two states of the same

[41] I however have to point it out that functionalism has some common points with behaviorism and some functionalists may even be described as behavioral functionalists.

type is not what they are made of, but the fact that they perform the same function within the overall system. An important technical device for functionalists is being able to rewrite sentences referring to beliefs and other mental states without having to refer directly to such states but only having to invoke the notion of a functional specifier in terms of causal role; such sentences are referred to *Ramsey Sentences*. John Searle (1992) describes how the Ramsey Sentence works in the following way:

> Suppose that John has the belief that *p*, and that this is caused by his perception that *p;* and, together with his desire that *q*, the belief that *p* causes his action *a*. Because we are defining beliefs in terms of their causal relations, we can eliminate the explicit use of the word "belief" in the previous sentence, and simply say that there is something that stands in such-and-such causal relations. Formally speaking, the way we eliminate the explicit mention of belief is simply by putting a variable, *"x"*, in place of any expression referring to John's belief that *p;* and we preface the whole sentence with an existential quantifier (Lewis 1972). The whole story about John's belief that *p* can then be told as follows:
>
> (∃x) (John has *x* & *x* is caused by the perception that *p* & *x* together with a desire that *q* causes action *a*) (Searle 1992:41-42).

Later Putnam (now as a 'black-box' functionalist) argues against his earlier views, by showing that there is nothing mental about mental states. For him, the nature of a mental state is clearly of no concern to the workings of the mind in terms of inputs and outputs. Putnam claims that if, in the case of minds, we concentrate on the nature of the stuff of the functional system we are completely misled and wasting our energy on issues that are irrelevant to the important issues about minds. These include how we can learn, what we tend to like, and so on, and what follows with respect to these issues from the fact that we are functional systems.

2) Analytic functionalism is defined as an "account of the meaning of the mental state terms – an elucidation of the mental state concepts – in functional terms" (Braddon-Mitchell and Jackson 1996: 46); it is also known as "common-sense functionalism" (Braddon-Mitchell and Jackson 1996: 42; Burwood *et al.* 1999: 49). This variety of

functionalism is credited to Donald Armstrong (the irreducibility of mind with commitment to anomalous monism, see e.g. (Armstrong 1968; 1970) and is different from Putnam's thesis. Armstrong's thesis simply states that "mental states are defined in terms of their causal role" (Chalmers 2002: 5). The variety "draws *inter alia* on the conceptual connection that behaviourism noted between mind and behaviour, but in a more moderate and thus more plausible form" (Braddon-Mitchell and Jackson 1996: 46). The connections are governed by *ceteris paribus* clauses (*ibid.*). To paraphrase examples from Braddon-Mitchell and Jackson (1996): 1) the fact that pain is typically caused by bodily harm and leads people to behave in a way that they believe will relieve pain is part of how we conceive pain; 2) the fact that perception typically leads to belief is taken to be part of our conception of pain (*ibid*.). Therefore, in my view Levin (2004) sums it succinctly when she puts it as follows, "analytic functionalism, permits reference to the causal relations that a mental state has to stimulations, behaviour, and other mental states" (Levin 2004: n.p.).

3) Psycho-functionalism, "derives primarily from reflection upon the goals and methodology of 'cognitive' psychological theories" (Levin 2004: n.p.). This variety is therefore about explaining details of what is called "the causal occupant of the functional role" (Maslin 2001: 134): 1) in human beings this consists in processes in the human nervous system; 2) also conceivable for them is "that mental functions may also be embodied in other quite different sorts of physical arrangement" (*ibid*.), e.g. Martians (green slime in their head) or androids (Data in Star Trek) mentality as embodied in chips comprising a silicon brain (*ibid*.). Accordingly, it adopts the "methodology of cognitive psychology in its characterization of mental states and processes as entities defined by their role in a cognitive psychological theory" (Levin 2004: n.p.). What makes this strain of functionalism distinctive from, for example,

> machine state functionalism, is its claim that "mental states and processes are just those entities, with just those properties, postulated by the best *scientific* explanation of human behaviour" (*ibid.*). This suggests two issues, 1) that the form of the theory can diverge from the "machine table" specifications of machine state functionalism, and 2) the information used in the functional characterization of mental states and processes needn't be restricted to what is considered common knowledge or common sense (*ibid*).

Despite the varieties of functionalism, there is general consensus or some common grounds for what constitutes functionalism; there are also disagreements, among functionalists. I begin by summarising what unites them and then point out some of the disagreements.

1) Functionalists agree that the general shape of the right theory of mind is that it has three parts, input clauses – clauses that say what sorts of events cause mental states in people, output clauses – clauses that say what sorts of behaviours are caused by mental states, and internal states – clauses that describe the internal interactions of mental states.
2) They agree that mental stats are inner states that occupy or fill the roles specified by those clauses.
3) They agree that one of the great strengths of functionalism is that it allows for what is known as *multiple realizability*. This is the idea that these roles could be filled or occupied by quite different kinds of things in different cases (*author's emphasis* Braddon-Mitchell and Jackson 1996: 41-42).

Functionalists disagree on,

1) The nature of mental *properties*, and
2) How to specify the clauses in order to capture what is essential to having a mind
   or
3) Being in one or another mental state,
   or
4) Indeed, whether functionalism is in the business of specifying what is *essential* in the first place (*ibid.*).

As I wrap this discussion on functionalism, I quote Paul M. Churchland (1986) in his book *Matter and Consciousness*, who defines the theory of functionalism as follows:

> According to *functionalism*, the essential or defining feature of any type of mental state is the set of causal relations it bears to (1) environmental effects on the body, (2) other types of mental states, and, (3) bodily behaviour. Pain, for example, characteristically results from some bodily damage or trauma; it causes distress, annoyance, and practical reasoning aimed at relief; and it causes wincing, blanching, and nursing of the traumatised area. Any state that plays exactly that functional role is a pain, according to functionalism. Similarly, other types of mental states (sensations, fears, beliefs, and so on) are also defined by their unique causal roles in a complex economy of internal states mediating sensory inputs and behavioural outputs (Churchland 1986: 36).

His definition draws away from behaviourists, who espouse the doctrine that "mental states are behavioural dispositions" (Braddon-Mitchell and Jackson 1996: 29). Such a behaviourist perspective solely identifies the mental state in terms of environmental input and the behavioural output. Churchland (1986) in the extract above, shift away from such a narrow view and characterises the mental not only in terms of causal links between inputs and outputs, but argues that adequate specification of mental states also requires that there be a reference to the other mental states to which it is causally connected.

I will now introduce the two examples of anti-physicalist arguments: the knowledge argument and the conceivability argument

2.2. Two Anti-physicalist Challenges: The Knowledge argument (Jackson) and the Conceivability argument (Chalmers)

There are a couple of problematic issues related to reductive physicalism (RP):

1) it fails to account for phenomenal properties, e.g. colour experiences (Braddon-Mitchell and Jackson 1996: 123). And,
2) it fails to account for consciousness (Goff 2017: 64).

To discuss these issues; there are several avenues: without going into detail about the latter as it is a very complex topic of its own, I focus on the former and briefly here introduce the two most popular challenges against reductive physicalism (RP) in contemporary philosophy of

mind: the knowledge argument (Jackson 1982, 1986)[42], which I will discuss in the next chapter and the conceivability argument (Chalmers 1996)[43]. As examples of anti-physicalist arguments, the structure of these arguments is that they start "from a premise about an *epistemic, conceptual or explanatory gap* between physical and phenomenal descriptions and conclude – on a priori grounds – that physicalism is false" (*author's italics* Balog 2009: 301)[44].

In terms of the conceivability argument, Chalmers (1996, 2009) offers an attack on reductive physicalism (RP). The primary thesis of the conceivability argument is as follows: I quote the following passage from *The Conscious Mind: In Search of Fundamental Theory*:

> I confess that the logical possibility of zombies seems equally obvious to me. A zombie is just something physically identical to me, but which has no conscious experience – all is dark inside. While this is probably empirically impossible, it certainly seems that a coherent situation is described; I can discern no contradiction in the description. In some ways an assertion of this logical possibility comes down to a brute intuition, but no more so than with the unicycle (Chalmers 1996:96).

According to Goff (2017), "conceivability arguments involve a *conceivability principle*: a principle asserting some kind of link between conceivability and possibility" (Goff 2017: 77). Henry Taylor (2017) says,

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[42] For this thesis, I maintain Jackson's original view (1982, 1986). The purpose of this disclaimer is that since the publication of those two papers and the subsequent discussions that ensued, Jackson (1998), has since capitulated, he wrote "Most contemporary philosophers given a choice between going with science and going with intuitions, go with science. Although I once dissented from the majority, I have capitulated and now see the interesting issue as being where the arguments from the intuitions against physicalism—the arguments that seem so compelling—go wrong. For some time, I have thought that the case for physicalism is sufficiently strong that we can be confident that the arguments from the intuitions go wrong somewhere, but where is somewhere?" (Jackson 1998 in Ludlow, Nagasawa and Stoljar 2004: 421). In the foreword of *There's something about Mary: Essays on Phenomenal Consciousness and Frank Jackson's Knowledge argument,* by Peter Ludlow, Yujin Nagasawa and Daniel Stoljar. eds. (2004), Jackson goes into some detail to explain "why he no longer agrees with the knowledge argument, I do think it has been, and continues to be, a major impetus to many debates that have cast a great deal of light on some very hard problems in the philosophy of mind. In many ways, I wish I could still accept it" (Jackson 2004: xix). I share Yanyan Zhao's (2012: 304) view, how ironic it can be that after sixteen years of defending the [successful] knowledge argument, Jackson announced in that year that he had changed his mind, stating that although his argument contained no obvious fallacy its conclusion – physicalism is false – must be mistaken (Jackson 1995, 1998). See also Robert Van Gulick (2004) "So many ways of saying no to Mary".

[43] Sometimes the conceivability argument is referred to as the Zombie argument. There are other versions of this style of argument, e.g. Descartes sixth meditation, what Goff, calls the "Cartesian conceivability argument" (Goff: 2017: 77); see also, his discussion on conceivability arguments (Goff 2017: 77-105).

[44] See also Balog, K. (2012) "In defense of the Phenomenal concept strategy".

> Crucial to the conceivability argument is the notion of a zombie, which is a being physically identical to a conscious creature in every way (including brain structure, physical behaviour, etc.) but which lacks phenomenal consciousness (Taylor 2017: 1896).

In its most elementary form the conceivability principle asserts that anything that is conceivable is possible. In the last twenty years the conceivability or 'zombie argument' against physicalism has become very familiar in attacking reductive physicalism (RP), especially Chalmers' (1996) contemporary version. Kirk[45] believes that Chalmers[46] has offered the most systematic use of the zombie idea against physicalism (Kirk 2015: n.p.). Due to scope, I reserve any further discussion of this form of anti-physicalist challenge, which others, as pointed out above, label a *zombie hypothesis*, "an argument for dualism" (Platchias 2011:17), for another occasion.

2.3. Conclusion

In this Chapter, I introduced one of the most persistent philosophical dilemmas in philosophy of mind, namely the mind-body problem. The searches for solutions to this problem have aligned philosophers and others mainly within two conceptual categories: either the dualist camp or the orthodoxy monist camp. These camps have since inspired several responses to the mind-body problem. I limited myself to discussions of dualism, functionalism and physicalism. I discussed two arguments for dualism: 1) Leibniz's *law of the indiscernibility of identicals;* and 2) Descartes' *Cartesian turn*. Secondly, I introduced materialism which is a monistic doctrine, and which, in its modern guise, is called physicalism. In my further discussion of physicalism, I looked at its two varieties; viz., reductive physicalism (RP) and non-reductive physicalism (NRP). Subsequently, I briefly introduced Jackson's *property*

[45] Robert Kirk (1974) introduced the zombie argument but he has since "changed sides and started to argue that zombies are not just impossible, but inconceivable as well" (see, for example, Kirk 2007), (Prelevic 2017: 497).
[46] In recent years, Chalmers also seemed to change his view on zombies. See the interview: "What Is It Like to Be a Philosopher?" (2016), which is available at: http://www.whatisitliketobeaphilosopher.com/#/david-chalmers/.

dualism as an example of non-reductive physicalism (NRP). I discussed functionalism next, a monistic doctrine that claims "what makes something a mental state of a particular type does not depend on its internal constitution, but rather on the way it functions, or the role it plays, in the system of which it is a part" (Levin 2004: n.p.). Functionalism is reductionist (Maslin 201: 143), that is, it reduces mentality to input-output structures (functional roles). The final section of the Chapter introduced two specific anti-physicalist challenges to reductive physicalism (RP): 1) the knowledge argument (Jackson 1982, 1986) and 2) the conceivability argument (Chalmers 1996).

In the next Chapter, I introduce the knowledge argument in terms of metaphysical and/or epistemological descriptions. In my view, a physicalist reading of the mind-body problem should be able to address metaphysical aspects arising in physicalism, as well interpret epistemological aspects, since both approaches (metaphysical and epistemological) offer attempts or avenues of solving the nagging mind-body problem. As pointed out already, I will not discuss the conceivability argument anymore going forward.

Chapter 3. The Knowledge argument

3. Introduction

In the last Chapter, I introduced a philosophical dilemma in philosophy of mind, namely the mind-body problem. I discussed how the searches for alternative solutions to this problem have allowed philosophers and others to complement each other by navigating mainly through the dualist camp, and the physicalist or functionalist camps. Inspired by these camps, several philosophical approaches to the mind-body problem have been formed. I limited myself to consider approaches within dualism, materialism as a monistic doctrine, and which, in its modern guise, is called physicalism and functionalism. In my discussion of physicalism, I focused on two varieties of physicalism; viz., reductive physicalism (RP) and non-reductive physicalism (NRP). I then briefly introduced Jackson's non-reductive physicalism NRP), that is, his property dualism. For functionalism, I focus on three versions; viz., machine-state functionalism, analytic functionalism and psycho-functionalism. The final section of the Chapter introduced two specific anti-physicalist challenges to reductive physicalism (RP): 1) the knowledge argument and 2) the conceivability argument.

In this Chapter, I discuss the knowledge argument. The aims for Chapter three are multi-faceted: In the first section, I seek to describe the debate on the knowledge argument in two ways; that is as a consideration that involves;

1) metaphysical, and
2) epistemological terms.

I will begin with the epistemologically directed side before I move on to the metaphysically inspired side of descriptions of the knowledge problem.

Furthermore, in my view, situating the knowledge problem within the broader mind-body debate in contemporary philosophy of mind, concerns two issues that need to be clearly established:

1) addressing reductive physicalist challenges to the mind-body problem; and
2) outlining the support for non-reductive physicalist views.

In my view, both issues enrich the knowledge argument debate within the context of the general mind-body problem, and addressing these issues is attempted in Chapter four when I deal with the responses to the knowledge argument as well as the counter-replies.

The second section of this Chapter (Chapter three) is two-pronged; first, I briefly outline metaphysical problems in philosophy of mind: pertinent to the articulation of a conception of mind or/of the mental. I will describe the problems, under a unified label: *the quadruple metaphysical challenges of physicalism*, viz.:

1) Subjective experience (qualia – what it feels like to have a specific mental state);
2) Free will (what alternatives do rational agents have to make a choice);
3) Personal identity (sameness of self – physical and mental; as informed by Western and African approaches); and lastly,
4) Intentionality (how can physical entity (-ies) be understood as being directed upon a non-existential state of affairs or object? – also called "aboutness").

For the third section, I introduce a history of philosophical arguments that draws on the same intuitions upon which the Knowledge Argument rest. My survey of those arguments, also called "*knowledge intuition*", begins in Bertrand Russell's *logical atomism*: "a partly methodological viewpoint, and partly a metaphysical theory"[47], which according to Russell

[47] Klement, K. (2016). "Russell's Logical Atomism", *The Stanford Encyclopaedia of Philosophy* (Spring 2016 Edition), Edward N. Zalta (ed.), URL = <https://plato.stanford.edu/archives/spr2016/entries/logical-atomism/>.

"has forced itself upon me in the course of thinking about the philosophy of mathematics" (Stumpf and Fieser 2012: 400). The survey will discuss prominent examples such as; C. D. Broad (1925), Herbert Feigl (1958) and Thomas Nagel (1974) respectively, these three are among the precursors to Frank Jackson's (1982, 1986) knowledge argument.

Lastly, the fourth section will be an explanation of the current mind-body debate that challenges reductive physicalism (RP). I will focus on giving a detailed version of Jackson's knowledge argument: 1) the case of Fred, and 2) the case of Mary.

3.1. Knowledge argument: Introduction in terms of Metaphysical and/or Epistemological descriptions

As explained in the previous Chapter, in contemporary philosophy of mind; materialism – or rather, physicalism[48] – dominates and is the orthodoxy doctrine in the analytic tradition. In general, physicalism is branded as primarily a metaphysical theory. This is so, as physicalism is viewed as an approach that attempts to provide solutions to the mind-body problem by addressing the difference and relatedness in ontological nature between the mental and the physical (O'Connor and Robb 2003: 3). In other words, the physicalist task in current philosophy of mind,

> [has] therefore, been taken to be, to give an account of mental states which accommodates the causal role of the mental in a way that is compatible with such ontological and explanatory physicalism (Burwood *et al.* 1999: 28-29).

However, there is an epistemological shortcoming to the mind-body problem debate if the problem is addressed as only a metaphysical issue; in my view, the epistemological ought to form a symbiotic part of the debate on the mind-body problem. Consequently, I advocate a position that also explores the mind-body problem from an epistemological point of view. I suggest that reductive physicalists; and equally, non-reductive physicalists should embrace a

[48] As discussed earlier, see section 2.1.2., materialism or physicalism are used interchangeably and understood as referring to the theory that says everything that exists is only material.

balanced approach to the investigation of the nature of fundamental reality. So, in my view, the metaphysical and epistemological descriptions deserve equal considerations in the debate, as I will seek to show. I start with the epistemological view.

3.1.1. Epistemological view in articulating a Conception of Mind.

Although it would seem that in general physicalists take the epistemological perspective (we know about mind) on the nature of the mental as secondary; because they focus more on the ontological nature (nature of the things we know about); I want to argue that an epistemological perspective is an embedded part of considering the nature of the mind: which is generally taken as a metaphysical issue.

If we then focus on the epistemology of mind (and not only on the metaphysics of mind), we need to acknowledge that "we know about the mental – at least our own minds – in a way that is quite different from the way we know about the physical" (O'Connor and Robb 2003: 3). In addition, McGinn (1999) claims there is no epistemologically neutral conception of the mind: we cannot form an idea of *what* some mental phenomenon is without adopting one or another epistemological perspective on it (McGinn 1999: 7). McGinn explains as follows;

> since the epistemology of mind is constitutive of its nature, and since the epistemology is thus divided between first- and third-person ascriptions, it seems that the only way to find some unity in our mental concepts is to treat one or other perspective as primary in relation to the other – to regard one perspective as better revealing the true nature of the mental phenomenon in question. The hope then is to find a plausible way to connect the concept so determined with the other secondary aspect of its content (McGinn 199: 8).

My position, for instance, is however contrary to, for example, Philip Goff (2017), a metaphysician who is "primarily interested not in what exists but in what exists *fundamentally*: not in reality but in *fundamental reality*" (Goff 2017: 23-24). His work is a clear example of what I do not wish to offer here, that is, to argue only from a metaphysical perspective on the problem of mind-body relations. He claims:

> Physicalism is a metaphysical, not an epistemological thesis. It is a thesis that all reality – including experiental reality – is constitutively grounded in physical reality. It is not the thesis that all knowledge – including knowledge of experiental truths – can be derived from knowledge of physical truths (Goff 2017: 64).

I, on the other hand, will be maintaining a perspective that argues that addressing only "the difference in [ontological] nature between the mental and the physical" (O'Connor and Robb 2003: 3), without also probing what "we know about the mental […]" (*ibid.*) (on top of what we know about the physical), leaves out an important dimension of possible responses to the mind-body problem. This is the epistemological dimension focused on what is known and how we know reality, and not only on what exists (metaphysical)[49]. This implies that the epistemology of mind is focused on knowledge of subjective experience (SE) (*epistemological* physical information), and as we will see in Chapter four when I describe Jackson's (1982)[50] case of Mary.

I now move on to the metaphysical problems pertinent to the articulation of a conception of mind or/of the mental.

3.1.2. Metaphysical problems in articulating a Conception of Mind.

As stated often now, the dominant problem in philosophy of mind is the mind-body problem. The problem is explained in various ways. One example is Brian Cooney's probing questions "Am I then some nonphysical place (a mind or consciousness) *in addition* to being a body

[49] Terence Horgan (1984) in his paper "Jackson on Physical Information and *Qualia*" characterizes the knowledge argument, by identifying two readings of the argument, based on Jackson's portrayal of "physical information". According to Horgan we have he calls 1) epistemological aspects, *explicitly physical information* (Horgan 1984: 150), the information that Mary has acquired in the black and white room which makes it compatible with denying anything physical, and 2) metaphysical *ontologically physical information* (*ibid.*) highlights the ontological aspects of the same argument, the nature of the quale Mary experiences is a non-physical property she gets acquainted with it only after experiencing it. For a detailed discussion also consult, Kallestrup, J. (2006). "Epistemological physicalism and the knowledge argument" (https://www.jstor.org/stable/20010220).

[50] It has to be maintained that Jackson's version has been preceded by several earlier examples of the knowledge intuition, in this thesis, I restricted myself to only outlining the examples from Broad (1925), Feigl (1948), and Nagel (1974).

that takes up physical space? If so how do these ingredients of me relate to each other?" (2000: 1).

Solutions to this problem have been offered in a variety of forms including Cartesian dualism, materialism, and functionalism among others. For Descartes the "body and mind are considered to be distinct substances able to causally interact" (Burwood *et al.* 1999: 2) and this is what we now call Cartesian dualism. Materialists (or physicalists) and functionalists as monists have attempted to resolve the mind-body dichotomy by offering differing views as responses to the problem. Materialists assert the view that all that exist are material objects, their states, properties and relations (Heil 2004: 813). Functionalists in their turn offer a theory in the philosophy of mind which defines the nature of mental states and processes by "their causal or functional relations to each other and to perceptual inputs from the world outside and behavioural outputs expressed in action" (Harman 1990: 32). Their contention is that neither Cartesian dualists nor materialists could be the solution to address that issue.[51]

In this thesis, I have stated that my focus is on Cartesian dualism (the vivid divide between the mental and the physical) and physicalism (the view that that which is physical is all that exists). Also, as I have alluded to in Chapter two; given that I am working on the knowledge argument as an argument against reductive physicalism (RP), my discussion cannot further discussion of functionalism beyond the definition given above. I am focusing specifically on the form of physicalism termed non-reductive physicalism (NRP), specifically on Jackson's version, also known as property dualism. Recall, Jackson's conclusion in his knowledge argument is that qualia properties;

[51] According to Janet Levin, functionalism is the doctrine that "what makes something a mental state of a particular type does not depend on its internal constitution, but rather on the way it functions, or the role it plays, in the system of which it is a part" (2017: n.p.). The *function* involved here is a causal one, for example when I am in a mental state, believing that it will rain, then as I respond to that environmental stimuli, I take an umbrella with me (Burwood *et al.* 1999: 45).

> [A]re not identical to any physical (including functional) properties. This is not to say that phenomenal features of mental states are independent of physical features; Jackson allows, […] for [the] argument, that the physical fully determines the phenomena (Gertler 1999: 318).

3.2. The Quadruple Metaphysical Challenges to Physicalism in Philosophy of Mind.

Currently, articulating a conception of mind or of the mental must be consistent with the investigation of the mental by natural and biological sciences, as discussed in Chapter two. Attempts to elucidate these issues within the mind-body debate have resulted in what I label the *quadruple metaphysical challenges to physicalism* in philosophy of mind. These issues together make up the so-called 'hard problem' (Chalmers 2004: 617-618) in philosophy of mind; viz., the problem of consciousness (a mental state is conscious if there is something it is like to be in that state)[52]. Chalmers has pointed out that there is not just one problem of consciousness, "consciousness is an ambiguous term referring to many different phenomena" (Chalmers 2004: 617).

I will focus only on the following four issues relating to the problem of consciousness: 1) subjective experience; 2) free will; 3) personal identity, and 4) intentionality. Given that I am working in the context of the knowledge argument against reductive physicalism (RP) in this thesis and that I do not have the space to adequately address all these issues in much detail, I will focus on the issue of subjective experience (SE) as it relates directly to Jackson's non-reductive argument. However, I will attempt very brief descriptions of the other three challenges to physicalism i.e. free will, personal identity and intentionality in the next section.

[52] David Chalmers (2004) in the article, "The problem of consciousness" has pointed out that terms like phenomenal consciousness, qualia, conscious experience, experience are also used in referring to "consciousness".

3.2.1. Subjective Experience (SE) (Qualia)

My discussion of qualia will mainly focus on the use of the term by 'qualia freaks' (those who espouse a non-physicalist theory of mind), who hold - "[…] that the property of phenomenality is a simple, irreducible nonphysical property, as is each basic individual quale" (Tye 2007) – within the philosophy of mind, i.e. the discussion will be on qualia as phenomenal qualities conceived and defined as falling outside the physicalist picture. However, there is also the second use of the term in terms of a positive attitude towards some intrinsic feature of mental states. Overall, I aim to show the importance of a consideration of qualia for non-reductive physicalism (NRP) or property dualism, of which the work of Jackson is a prime example as discussed in Chapter two.

The term 'qualia' is used to refer to subjective experiences – and the issue is to debate how a physical state can account for what it feels like to be in a certain state. 'Qualia' is a Latin term (the plural of 'quale') which is used often "exclusively" by philosophers to refer to the introspectively accessible, phenomenal aspects of our mental lives that physicalists seek to account for (Burwood *et al.* 1999: 118). Others refer to them as "what-it-is-likeness", the way things seem to me, or "raw feels". The "what-it-is-like" phrase is owed to Thomas Nagel (1974), with the term "raw feels" used predominantly in psychology (Braddon-Mitchell and Jackson 1996: 122). Charles Sanders Pierce introduced the term "quale" into philosophy in 1866 (Tye 2017: n.p.). The concept of qualia (subjective experience) links to what is termed the "explanatory gap" argument (Levine 1983: 354).

Joseph Levine (1983) coined the notion of the explanatory gap to express the problem that arises from attempting to give an account of the existence of such phenomena of conscious experiences in physical terms, without discarding physicalism. As an argument the explanatory gap posits that if phenomenal properties cannot be explained in terms of physical

facts, then they are non-physical features of the world, contrary to physicalism (Burwood *et al.* 1999: 118). Levine (1983) put forward the idea that there is a 'gap' in our ability to explain the connection between phenomenal states and the properties of our brains. For example, when non-philosophers ask "How or why are we able to isolate the particular smell of coffee using our brain?" inadvertently, they are acknowledging the "explanatory gap". Levine (2006) in an article "Conscious Awareness and Self-representation" points out that the difficulty of explaining consciousness is something peculiar. For instance, we do not struggle to explain why water is H_2O, in the same way that we struggle to explain why brain states are phenomenal states (*ibid.*). The phrase "the explanatory gap" feeds on our ever-present dualist thinking: however, in current philosophy of mind the physicalist view is orthodoxy, hence the problematic impression arising that there is something left unexplained by mind-brain identities (Papineau 2002).

For the physicalist, qualia as distinctive features of what it is like to have a stubbing pain, smelling a skunk or seeing the fire engine, and so on should be something that is explainable in terms of physical features of the particular state that the subject is in when they have these experiences. But as we are aware this is not so simple, because in the world the occurrence of qualia in terms of physical facts cannot be explained. The existence of non-physical quale in the world is quite problematic considering an adherence to physicalism. The idea is that we fail to explain how a phenomenal state is identical with a physical state of the brain. This is a serious problem for physicalism since if phenomenal properties cannot be explained in terms of physical facts, then they are non-physical features of the world, contrary to physicalism (Burwood *et al.* 1999: 118).

Presently, as a technical term, "qualia" thus has a dual use as stated earlier;

1) as used by "qualia freaks"; here qualia are phenomenal qualities (bodily sensations and perceptual experiences) conceived as a matter of definition as falling outside the physicalist picture, such as the-feeling-what-it-is-like, subjective experience, a phenomenal feel, e.g. a sharp pain, a flash of lightning, or itch on my arm, and so on (Braddon-Mitchell and Jackson 1996: 122-123),
2) and, others use "the term to name phenomenal qualities conceived by definition as involving some relatively intrinsic feature, some feature not capturable functionally, of our mental states", cognitive states or the distinctive features of consciousness such as emotions, intentions, desires, beliefs, and so on. (Braddon-Mitchell and Jackson 1996: 123-124).

When I refer to subjective experience or qualia I therefore have the following examples as the two clusters of differing experiences in mind: 1) sensations of colours, sounds, tastes, texture, and smells. And, 2) toe-stubbing pain, muscle ache, tickles and so on. Respectively, these two clusters form part of the "mighty perennials of the philosophy and science of consciousness" (Honderich 2014: 78). These are all states with an intrinsic nature i.e., they are not about anything external to them, but about how they feel to the person experiencing them and can (supposedly) only be experienced by the person experiencing them. As such they are uniquely mental, yet some intentional states are also phenomenal – i.e. they have the property of what-it-is-like/feels like to [...] (*ibid*.). I give three examples from, Braddon-Mitchell and Jackson (1996, 2007), Burwood *et al.* (1999) and Chalmers (2002c) to explain.

Braddon-Mitchell and Jackson (1996, 2007) categorize them as psychological states for which there is *something it is like to be in them* (sensations of colours, sounds, tastes, texture, and smells) and those states that are intrinsic (toe-stubbing pain, muscle ache, tickles and so on) (1996: 122-123). Burwood *et al.* (1999) characterize the concept of subjectivity in Nagelian terms, i.e. "what it is like for its subject to have the experience" (1999: 138). It is this feature of subjectivity that makes experience accessible only to creatures with the same point of view (*ibid*: 139). Chalmers (2002c) states that phenomenal properties are properties characterizing what it is like to be a subject (being), or what it is like to be in [that] mental state (2002c: n.p.). In his view there is something it is to be human, "human beings have

subjective experience: there is something it is like to be them" (2003: 103). Therefore, what we say about our experiences of what-it-is-like to be (qualia) is inter-subjectively communicable and testable, but not the feeling-what-it-is-like to experience them. Phenomenal properties are immediately and privately accessible to the subject. As such the first-person perspective provides the only identification of such properties.

Phenomenal states are also called conscious mental states, and as described they have two notable differences with intentional states. Intentional states are mental states when they are about something, or directed at some object. For example: beliefs and desires; perceptions and sensations; mental images; emotions, and so on. The two notable differences between conscious mental states and intentional mental states can be stated in the following ways. Firstly, we are conscious of qualia in a manner that we are not always conscious of our beliefs, desires and other intentional states (*ibid*.). Secondly, they do characteristically have a physical cause, but they are not *directed towards* or *about* what is external to them; they are intrinsic. As such a complete theory of mind must be able to provide for these mental states of experience (*ibid*.).

Broadly, it is difficult to deny that there are qualia since they inundate our ordinary living experiences e.g., the aroma of coffee, the taste of biltong, the feel of sunburn, the sound of Mozart's Requiem, muscle ache after cycling the 94.7 cycle challenge, a mallet finger pain, and so on. What each of these subjective conscious experiences have is that they each have their own particular "quale". Looking at the categories outlined earlier they are events that we are so aware of because they causally affect us in the world.

While Nagel wrote that qualia (subjective character of experience) are a widespread phenomenon (Nagel 1974: 436) in humans, he acknowledges those who argue for the view that we cannot be sure of the presence of qualia in simpler organisms, such as single cell

organisms (*ibid.*). Michael Tye (2017) has elaborated on this issue – i.e. the categorization of conscious experience, in simpler organisms. Tye says,

> disagreement typically centres on which mental states have qualia, whether qualia are intrinsic qualities of their bearers, and how qualia relate to the physical world both inside and outside the head (2017: n.p.).

What emerges from my brief excursion into the subjective experience debate is that there is general consensus about their existence among non-reductive physicalists. However, there is need to acknowledge the difficulties noted above, specifically in categorising them. Without doubt, at present, the concept of qualia occupies the very heart of the broader mind-body problem; and especially the "quest to understanding the nature of consciousness" (*ibid.*). The general truth is we might have a lack of knowledge about subjective experience in simpler organisms, however we are positive there is something it is to *be* that "simpler" organism (Nagel 1974: 436). So, qualia at the very least, raises a question as to whether they are physical, or emerge or supervene on the physical, thus somehow inherently form part of the physical world, even if they are mental properties, or, whether they are somehow not reconcilable with physicalism at all. Such a question is especially pertinent to those who understand consciousness as something within the natural world, implying that qualia are somehow physical (Honderich 2014: 19).

3.2.2. Free Will

The concept of free will is a technical philosophical term, among the four major problems that has plagued the human story for over two millennia and continues to be a problem to physicalists – how can we demonstrate free will as being incompatible with determinism[53].

[53] Peter van Inwagen (2008) "How to think about the problem of free will".

According to Keith Campbell, "free will", as a philosophical term, denotes a particular capacity whereby rational agents choose a course of action from among various alternatives (1970: 89). Many different philosophers have contributed in some way to the debate about the concept of free will; for instance, the empiricist David Hume in his book *An Enquiry Concerning Human Understanding* wrote;

> But to proceed in this reconciling project with regard to the question of liberty and necessity; the most contentious question of metaphysics, the most contentious science; it will not require many words to prove, that all mankind have ever agreed in the doctrine of liberty as well as in that of necessity, and that the whole dispute, in this respect also, has been hitherto merely verbal. For what is meant by liberty, when applied to voluntary actions? We cannot surely mean that actions have so little connexion with motives, inclinations and circumstances that one does not follow with a certain degree of uniformity from the other and that one affords no inference by which we can conclude the existence of the other. For these are plain and acknowledged matters of fact. By liberty, then, we can only mean *a power of acting or not acting, according to the determinations of the will;* this is, if we choose to remain at rest, we may; if we choose to move, we also may (*Of Liberty and Necessity Part 1: n.p.*).

By this compatibilist[54] contribution to the discussion of free will, Hume seeks to point out that the issue of free will is to be taken as two-tiered i.e.,

1) the exercise of freedom, and
2) "the antecedent conditions outside of myself, […] for which my choosing might be determined in advance by factors over which I have no control" (Campbell 1970: 89-90).

The concept of free will is also closely connected to the concept of moral responsibility (O'Connor 2016: n.p.). This would in general allude to the idea that if one is believed to act with free will; such an action can be equated to satisfying the metaphysical requirement of taking accountability for those actions (*ibid*.). Free will is a highly contested metaphysical

[54] According to McKenna and Coates, (2015) "compatibilism is the thesis that free will is compatible with determinism. Because free will is typically taken to a necessary condition of moral responsibility, compatibilism is sometimes expressed as a thesis about the compatibility between moral responsibility and determinism". To put this definition in perspective, let me give a common characterization of determinism, which states that "every event is causally necessitated by antecedent events" (*ibid.*). Using such a characterization, McKenna and Coates (2015) define determinism as a "metaphysical thesis that facts of the past, in conjunction with the laws of nature, entail every truth about the future" (*ibid*.).

concept that challenges the physicalist perspective viz., how do we account for the physical as giving rise to freedom and choosing.

Campbell (1970) believes that we only have free will if we can make *metaphysical choices* or causeless choices (*author's emphasis* 1970: 90). So, for instance, free will would be a problematic issue for central-state materialism (*ibid.*), which is a form of physicalism. This is the case since for Campbell, a metaphysical choice is, or leads to, a brain state which sets activity going. This brain state is not caused by any earlier conditions of the brain or anything else (*ibid.*). So, in his view, not all brain states come into existence as effects of physical forces. Therefore, if he is right and there is metaphysical choice, central-state materialism (with its emphasis on physical causes), for instance (and by implication, all reductive physicalist views) is false (*ibid.*). I will leave the discussion here, having pointed out at least a framework of the problems of including free will in a reductive physicalist agenda.

3.2.3. Personal Identity

As part of the quadruple problems for reductive physicalism, another thorn for physicalists is the concept of personal identity or sameness of self (physical and mental) over time (Cooney 2000: 9), which at times is discussed as the issue that investigates the "self"[55]. The issue of personal identity from a Western continental perspective emphasises the notion of self and personhood. From the Western analytical point of view, the issue is portrayed as a metaphysical problem: the problem of persistence of identity is central. In African philosophy the approach to the concept seems a mixture of the two above mentioned approaches.

To illustrate the problematic issue for the mind-body problem, let's focus on the analytical view, specifically the view that persistence of identity is somehow psychological. For

[55] In general, the "self" refers to the "person" in some specific contexts, but often the term "self" carries a specific meaning, where it refers to some sort of immaterial subject of consciousness (Olson 2017: n.p.).

instance, the philosopher John Locke placed emphasis on the psychological continuation of identity in terms of a chain of memories, rather than continuity through physical identity (matter) that was synonymous with Aristotle's views for instance. For Locke, (Book 2, *Chapter 27, An Essay concerning Human Understanding*):

> [A] person, […] is a thinking intelligent being, that has reason and reflection, and can consider itself as itself, the same thinking thing, in different times and places; which it does only by the consciousness which is inseparable from thinking, and, as it seems to me, essential to it […] (Locke in Robinson 1998: 297)

This leads us to the view of personal identity whereby there remains something sufficient over past and future times in a person. Locke put it as:

> For, since consciousness always accompanies thinking, and it is that which makes everyone to be what he calls self, and thereby distinguishes himself from all other thinking things, in this alone consists personal identity, i.e. the sameness of a rational being: and as far as this consciousness can be extended backwards to any past action or thought, so far reaches the identity of that person; it is the same self now as it was then; and it is by the same self with this present one that now reflects on it, that that action was done (*ibid.*).

For the physicalist such an approach to the issue of personal identity is problematic, since for them all that exists is physical. We do have a conundrum here, how then do physicalists explain the constant interaction about mental (consciousness) on one end, and on the other end, the physical which occupies space in making up a person's identity, let alone explaining the notion of 'self' which we do not even have any sensory experience of, as Hume in *A Treatise of Human Nature*[56], famously pointed out,

> Unluckily all these positive assertions are contrary to the experience, which is pleaded for them, nor have we any idea of *self*, after the manner it is [...] explain'd (Hume in Robinson (1998: 301-302).

Again, I will leave the discussion here, having at least pointed to one feature of the problematic of personal identity for the reductive physicalist.

[56] Hume, D. (1978). "Of Personal Identity". *The Mind*. D. Robinson (Ed.) (1998). Oxford: Oxford University Press.

3.2.4. Intentionality

Lastly, among the quadruple of concepts that challenges physicalism in philosophy of mind is intentionality – how can any purely physical entity or state be "about" or "directed upon" a non-existential state of affairs or object?

According to Pierre Jacob, intentionality is the power of minds to be about, to represent, or to stand for, things, properties and states of affairs (2014: n.p.). Its etymological roots are taken from the Latin word *intentio*, as derived from the verb *intendere*, a word which in its Latin usage means being directed towards some goal or thing (*ibid.*). The word "intentionality" is of medieval Scholastic origin with some scholars translating the word into English as 'intention'- "but it should be borne in mind that this is not meant to have the inferences of the everyday notion of intention" (Crane 1998: n.p.). The word "intentionality" connotes a specialised usage – made famous by Franz Brentano[57] – away from the everyday meaning as pointed out earlier, and is mostly used by philosophers who emphasize that only mental states have this particular property. In that specialised philosophical usage, intentionality is the directedness of the mind, i.e. mental states are directed towards some specific object, or are about what is external to them (*ibid.*). In now popular philosophical jargon, philosophers speak of "aboutness" when speaking about intentionality.

The concept intentionality as "directedness" or "aboutness" towards some object or content (Cooney 2000: 9) received a major rehabilitation by Brentano in the nineteenth century in his book *Psychology from an Empirical Standpoint.* He wrote,

> Every mental phenomenon is characterized by what the scholastics of Middle Ages referred to as the intentional (and also mental) inexistence of the object, and what we, although with not quite unambiguous expressions, would call relation to a content,

[57] He is mainly known for his work in philosophy of psychology, notably for having (re)introduced the notion of intentionality to contemporary philosophy in his famous book *Psychology from an Empirical Standpoint* (1874).

> direction upon an object (which is not here to be understood as reality) or immanent objectivity (Brentano [1874] 1973: 88).

So, in general philosophers claim mental states have "aboutness" in that they are about something (Platchias 2011: 94). The "aboutness" ties the mental states as it were to the world: referring to what it is that they are about (object of that state). To exemplify, I adapt Platchias' (*ibid*.) example. If you are thinking about Cape Town or about your appointment with the ophthalmologist in a week's time, then your thinking is directed towards (or is about) Cape Town or your appointment with the ophthalmologist. Mental states and only mental states are characterisable in this way. Likewise, we have the ability to accept as true when we think of and even worship non-existent things e.g. Bobby Henderson's 2005 creation of the flying spaghetti monster[58]. According to Platchias,

> we cannot cut a non-existent piece of paper or be to the left of a non-existent chair. The idea, generally, is that thinking of some*thing* does not entail or imply necessarily that *it* exists (*author's italics ibid*.).

The concept of intentionality raises two related problems which include:

1) how is intentionality possible at all? And,
2) given that it is possible how is it that intentional states have the specific contents as they do have?

These two problems arise from the fact that we exist in a physical world, so how to motivate our course of actions as directed is unexplained in physical terms.

[58] The notion of the Flying Spaghetti Monster was created by Bobby Henderson, a physics graduate from Oregon State University, in 2005. Bobby wrote a letter about the character and sent it in to the Kansas State Board of Education to satirize creationism and oppose its place in schools. His argument was that his belief in his noodly appendage was no more false than any other creationist beliefs. Afterwards, through his website and the internet, the satirical joke grew and spread into a satire religion. Light-hearted and fun, many play with the myth and the legend of the Pastafarian deity to ingeniously lampoon religion. Henderson has since written and published the 'Gospel of the Flying Spaghetti Monster' to be the written text for the Church of the Flying Spaghetti Monster, otherwise known as Pastafarianism (https://comicvine.gamespot.com/flying-spaghetti-monster/4005-98458/).

To recap, the metaphysical quadruple of concepts that are a problem for physicalism are the concept of subjective experience together with the concepts of free will, personal identity and intentionality. In general terms, these four concepts that I have briefly explained have persistently been refashioned and offered as attempts at refuting the physicalist argument. Specifically, in philosophy of mind, intentionality as well as subjective experience (qualia) are the principal objections to the two monistic concepts functionalism and physicalism. As outlined earlier, these two approaches explore another type of view of the mind, away from the dualistic view, as responses to the mind-body problem. For my purposes, i.e. analysing challenges to reductive physicalism (RP), I focus on the concept of subjective experience (SE) (qualia) (within the knowledge argument scenario).

As for the other parts of the quadruple, I will not go beyond the brief discussions above; although I acknowledge that they do offer concerted challenges to physicalism. However, in my view, the concept of subjective experience (qualia) is the best placed to show the inadequacy of the reductive physicalist thesis. I argue in subsequent Chapters of this thesis to support the assertion.

In the next section, I offer some historical remarks that foreshadowed the knowledge argument[59] exemplified by distinct examples called knowledge intuitions; they include the work of Charlie Dunbar Broad[60], Herbert Feigl, and Thomas Nagel among others[61]. I will end the section, which also marks the end the Chapter three, with a discussion of Frank Jackson's version of the knowledge argument.

[59] The dawn of the twentieth century has brought new life to debates about consciousness, with Jackson's version of the knowledge argument as one of the most discussed, important and contentious arguments that challenge physicalism in contemporary philosophy of mind.
[60] Generally referred as C.D. Broad in the literature.
[61] Other examples include Bertrand Russell, who is concerned not with metaphysics or physicalism, but with epistemology (Stoljar and Nagasawa 2004: 3); J.W. Dunne, an engineer, who is "primarily concerned with the nature of sight rather that the falsity of physicalism"(*ibid*. 5); B.A. Farrell's exposition, which has been labelled "somewhat less straightforward"(*ibid*: 7), because his themes are similar to Russell and Dunne; and Paul E. Meehl, who regards the "knowledge intuition as undoubtedly true"(*ibid*. 8).

3.3. Foreshadowing the Knowledge argument: The Knowledge Intuition

The idea that complete physical knowledge is not sufficient for complete knowledge of phenomenal states has been around for a while, and is generally accepted. This represents an example of how humans have speculated deeply about aspects of neuropsychology that have remained relevant throughout the history of thought. The generally accepted perspective is indeed that "it is not in dispute that we are in part physical things. We have physical bodies and are located in a physical world" (Braddon-Mitchell and Jackson 2007: 134), we are beings that occupy space. However, there is a conundrum that is unsettling; it concerns how to account for the non-physical aspects of our lived experiences, what philosophers call "qualia" our subjective experiences (SE). To reiterate,

> qualia are the specific, intrinsic contents of sensations and feelings, such as the painfulness of pain or the difference between the painfulness of a toothache and a headache, or between something feeling cool rather than warm to the touch (Cooney 2000: 8).

In the literature, one can trace the underlying idea of the knowledge argument back to the work of luminaries like C.D. Broad (1925), Herbert Feigl (1958), and Thomas Nagel (1974). The knowledge argument articulates one of the main forms of reasoning that doubts that all knowledge is physical. The knowledge argument has two parts. The first part states that physical knowledge is not sufficient for phenomenal knowledge. Call this *the knowledge intuition* (*author's italics* Stoljar and Nagasawa: 2004). The other part states that the knowledge intuition entails the falsity of physicalism. I will come back to emphasise how these two parts that are closely related make different claims later in the thesis:

1) for the knowledge intuition (Broad, Feigl and Nagel): something of a certain kind is left out;

Whilst,

2) for the knowledge argument (Jackson): physicalism is simply false.

I now trace some of the main lines of the history of knowledge intuition. Bertrand Russell (1918) in the lectures he calls *The Philosophy of Logical Atomism* gives what has been regarded as the earliest example of the knowledge intuition that foreshadows the knowledge argument. Russell (1918) foreshadows the argument by inviting us to consider two propositions: a proposition *p*, which contains "the colour with the greatest wavelength" (Russell 2010: 21), and a proposition *q*, which contains "red". Do these propositions have the same meaning? Russell says no (Platchias 2011: 133). For Russell (1918),

> If you try to define "red" as "the colour with the greatest wave-length" you are not giving the actual meaning of the word at all; you are simply giving a true description (Russell 2010: 22).

Since "the colour with the greatest wavelength" is simply a true description of "red"; it is not its meaning. What you mean by "red" is that *there is something it is like* for you to see that colour in immediate distinction from, say, "green" or "blue", and we cannot capture this distinction simply by appealing to wavelengths of light (*author's italics* Platchias 2011: 133).

In his paper "Epiphenomenal Qualia" Jackson (1982) acknowledges the knowledge intuition when he writes;

> Tell me everything physical there is to tell about what is going on in a living brain, the kind of states, their functional role, their relation to what goes on at other times and in other brains, and so on and so forth, and be as clever as can be in fitting it all together, you won't have told me about the hurtfulness of pains, the itchiness of itches, pangs of jealousy, or about the characteristic experience of tasting a lemon, smelling a rose, hearing a loud noise or seeing the sky (Jackson 1982: 127).

In this introductory passage, Jackson is introducing what he believes would be captured by his eventual knowledge argument. He aims to show that no amount of knowledge of a certain sort viz., a physical sort e.g. smelling a rose (*ibid*.), is going by itself to suffice for knowledge of categories of a different type, viz., a phenomenal sort e.g., knowing what it is like to smell

a rose (Stoljar and Nagasawa 2004: 2-3). In a nutshell, this is what is then called the "*knowledge intuition"* (*my italics ibid.*).

To explain, the knowledge intuition presents us with a *prima facie* modal truth; a truth about what is possible (Stoljar and Nagasawa 2004: 3). The knowledge intuition can be exemplified meaningfully in the following way; someone can know all the physical truths there are to know about an experience say, tasting a lemon, without actually knowing what-its-like to taste a lemon (*ibid.*). The underlying point about the knowledge intuition is logical and lies not in what we empirically know: we actually might not know *all* physical truths about tasting lemons. So, for Jackson, physical knowledge is not sufficient for phenomenal knowledge (*ibid*.). Thus, what we are confronted with is a logical problem in the sense that "knowledge of the physical sort does not suffice logically for knowledge of the phenomenal sort" (*ibid.*).

Various other insights for the knowledge intuition prior to Jackson's colour examples are readily available in the literature and have been expressed using diverse thought experiments[62]. As pointed out earlier, I will confine myself to Broad, Feigl and Nagel. Firstly, Broad speaks of the *Archangel*, secondly, Feigl expresses himself using the example of *Martians*, and thirdly, Nagel couches his ideas in a story about *Bats*. I start the historical survey with the example of the relationship between the mental and physical that is present in C.D. Broad (1925).

[62]Briefly, thought experiments are especially important for philosophers, as André Fuhrmann and Julia Telles de Menezes explain,

> Philosophers experiment […]. They have a way of exactly setting variables, holding them constant during the experiment and recording observations. Theories are then called upon to interpret the observations. Philosophers call such experiments *thought experiments*. Here is one that puts physicalism severely to the test. It threatens to waive physicalism's status as a default theory, if not to out rightly defeat it (2014: 168).

3.3.1. Broad's mathematical Archangel[63]

C.D. Broad's, *The Mind and its Place in Nature* was published nearly a century ago. In the second Chapter; "Mechanism and its Alternatives" he argues against a mechanistic view of the world and defends in its place an emergent view. This is one of the early attempts at illustrating a psychophysical relation present in nature. The version that Broad (1925) outlines would be echoed with time and find voice in Jackson's (1982) paper "Epiphenomenal Qualia".

The original idea of the psychophysical relation relevant to the knowledge intuition and argument debates appears in Broad's (1925) argument where he argues that mental properties are distinct from physical properties. In his view mental properties *are properties* that emerge when neurophysiological processes have attained a sufficiently high degree of complexity (Gustavsson 2017: n.p.). Such a view is modelled on Broad's roots as a neutral monist[64] (Broad 1925: 20-26). Neutral monism is a doctrine that claims ultimately reality is all of one kind. It differs from other monistic rivals (idealism and materialism) in that its main claim is that the intrinsic nature of that ultimate reality is neither mental nor physical and that ultimate reality is said to be neutral in-between the two (Stubenberg 2017: n.p.).

Broad (1925) illustrates the tussle between an emergent vs. a mechanistic analysis of reality. To put some perspective on the two theories, let us consider Broad's explanation of emergence:

> Put in abstract terms the emergent theory asserts that there are certain wholes, composed (say) of constituents A, B, and C in a relation R to each other; that all

[63] This "mathematical archangel" was an interesting reference to the great New Zealand-born British physicist; Professor Ernest Rutherford who studied radioactivity but is now remembered mostly as a leader in exploration of nuclear physics (https://www.biography.com/people/ernest-rutherford-39099 accessed February 8, 2018).
[64] For a detailed discussion on neutral monism, consult: Stubenberg, Leopold, "Neutral Monism", *The Stanford Encyclopaedia of Philosophy* (Winter 2017 Edition), Edward N. Zalta (ed.), URL = <https://plato.stanford.edu/archives/win2017/entries/neutral-monism/>.

> wholes composed of constituents of the same kind as A, B, and C in relations of the same kind as R have certain characteristic properties; that A, B, and C are capable of occurring in other kinds of complex where the relation is not of the same kind as R; and that the characteristic properties of the whole R(A, B, C) cannot, even in theory, be deduced from the most complete knowledge of the properties of A, B, and C in isolation or in other wholes which are not of the form R(A, B, C). The mechanistic theory rejects the last clause of this assertion (Broad 1925: 61).

There are two-fold issues to be attended to here:

1) what is the concept of emergence, and

2) addressing the doubt if any about the actual existence of emergent phenomena.

Focusing on the concept of emergentism: there are two different ways of applying the concept of emergence; firstly, in philosophy of mind it refers to irreducible phenomena: also referred to as emergent properties (Cooney 2000: 496). Secondly, the concept is applied in Cognitive Science where it refers to phenomena not explicitly programmed (Stephan 2006: 485). My focus here is on the former application. An emergent property is a "property of an underlying physical substance but cannot be deduced in principle from the low-level physical properties of that substance" (Chalmers 2002: 7). As such, emergence holds that the mental is that emergent property of an underlying physical substrate (*ibid*.), which would suggest that the mental-physical relationship relates to a supervenient notion. To encapsulate, the term emergence,

> [a]pplies to a property of a whole, which is (1) not a property of the parts, and (2) cannot be defined or understood in terms of properties of the parts (Cooney 2002: 496).

Inferring from the brief discussion above, emergent properties are irreducible (*ibid*.) to that from which they emerge.

Turning now to mechanistic properties, "the mechanistic theory"; for the present purpose is applied as Broad's label for the theory of what today is termed physicalism. Let us consider

Broad's example of an 'angelic mathematician' (the mathematician is reference to Sir Ernest Rutherford)[65] to illustrate the falsity of the mechanistic theory:

> Take any ordinary statement, such as we find in chemistry books; e.g. "Nitrogen and hydrogen combine when an electric discharge is passed through a mixture of the two. The resulting compound contains three atoms of hydrogen to one of nitrogen; it is a gas readily soluble in water, and possessed of a pungent and characteristic smell." If the mechanistic theory be true, the archangel could deduce from his knowledge of the microscopic structure of atoms all these facts but the last. He would know exactly what the microscopic structure of ammonia must be; but he would be totally unable to predict that a substance with this structure must smell as ammonia does when it gets into the human nose. The utmost that he could predict on this subject would be that certain changes would take place in the mucous membrane, the olfactory nerves and so on. But he could not possibly know that these changes would be accompanied by the appearance of a smell in general, or of the peculiar smell of ammonia in particular unless someone told him so or he had smelled it for himself. If the existence of the so-called secondary qualities, or the fact of their appearance, depends on the microscopic movements and arrangements of material particles which do not have these qualities themselves, then the laws of this dependence are certainly of the emergent type (Broad 1925: 71-72).

So, the mathematical archangel would not be able to show that *a defining property* emerges from the chemical compound called ammonia (NH_3), that is, Nitrogen (1 atom) and Hydrogen (3 atoms) when exposed to a current (Broad 1925: 71). So, the mechanistic claim is that the mathematician – who also has the ability to deduce the microscopic structure of atoms from his vast knowledge – would;

1) know the formula (NH_3) as representing ammonia,
2) know that it is a gas readily soluble in water, and
3) know that it possesses a pungent and characteristic smell (*ibid.*).

Broad's point is that out of the three characteristics if the mechanistic theory is true, then (1) and (2) would not be a problem to infer, but really (3) would be a challenge to isolate. Despite having "all" knowledge in its entirety, the arch-mathematician would not be able to predict the pungent smell ammonia emits, just by appealing to the greater understanding of

[65] By proposing an angelic figure Broad (1925) seeks a way of avoiding mathematical difficulties that could arise from a human figure, he claims it would be difficult, even if we structure the laws regarding the calculations.

the formula of ammonia (NH_3) or to other associated chemical reactions of the chemical compound (1925: 71-72). So, this example illustrates that even if a scientist knew everything in its entirety about physical sciences, the scientist would not necessarily know everything there is to know[66] logically.

There are two significant points to highlight from Broad's example; Firstly,

1) that there is a limit to theoretical prediction and
2) that physical sciences cannot exhaustively explain the material world.

Thus, for Broad (1925) it is not *a priori* impossible that chemistry and biology were mechanical, but they cannot be the whole truth of the material world, because smells, tastes, colours and other secondary qualities cannot be mechanically explained. The laws connecting microscopic particles or events with secondary qualities must rather be emergent laws, "[a]nd no complete account of the external world can ignore these laws" (*ibid*. 72). Clearly,

> […] existence of the so-called secondary qualities, or the fact of their appearance, depends on the microscopic movements and arrangements of material particles which do not have these qualities themselves, [and] then the laws of this dependence are certainly of the emergent type (Broad 1925: 71-72).

Achim Stephan (1992) in his article "Emergence: A systematic view on its historical facets", confirms that Broad tries to distinguish his position from a pure mechanistic one by claiming that the characteristic behaviour of a system is determined wholly by the behaviour of or the relations between its parts. Accordingly, the behaviour of any system is determined by its microstructure (Stephan 1992:37), but not necessarily in a way that can be captured mechanistically.

[66] Torin Alter also offers an argument for stating that complete knowledge of physical sciences cannot give the whole truth of the world (https://www.iep.utm.edu/know-arg/).

To recap, Jackson (1982) asserts that no matter how it is put together, no amount of knowledge of a certain sort is going by itself to suffice for knowledge of a different sort (Stoljar and Nagasawa 2004: 2). As such Broad's (1925) argument is taken as an important precursor, in terms of knowledge intuitions, to Jackson's much explored knowledge argument. In the final analysis, despite having "all" physical knowledge about the world it is evident that something about the world is left out, if the focus is only on knowledge of the physical. As Stoljar and Nagasawa (2004: 6-7) point out, Broad (1925) endorses some early version of the knowledge argument, from where we can draw a conclusion that physicalism is false, albeit not with focus on phenomenal properties as is the case with Jackson's argument. In the following section, I outline a variant of this argument as presented by Herbert Feigl in the 1950s also as part of debates over the identity theory[67].

3.3.2. Feigl's epistemic Martian[68]

Feigl's (1958) paper titled "The Cognitive Role of Acquaintance" was first published and in 1967, the long essay, added with a postscript – "Postscript after ten years", was published as a book with the title *The Mental and the Physical: The Essay and a Postscript*. The work represents another "physicalist version" of the knowledge argument that appeared just over a quarter of a century after Broad's physicalist analysis in support of the emergentist view. The work is presented as a thought experiment that discusses the epistemic limitations of a Martian who studies human behaviour but does not share (lacks) human sentiments (Nida-Rumelin 2009: n.p.). For Nina-Rumelin (2009: n.p.), the overarching principle that Feigl

[67] According to Steven Schneider, identity theory is a family of views on the relationship between mind and body. Type identity theories hold that at least some types (or kinds, or classes) of mental states are, as a matter of contingent fact, literally identical with some types (or kinds, or classes) of brain states. The earliest advocates of Type Identity—U.T. Place, Herbert Feigl, and J.J.C. Smart, respectively—each proposed their own version of the theory in the late 1950s to early 60s (http://www.iep.utm.edu/identity/.). Smart (1959) builds and extends on Place (1956), he states that the identity theory of mind holds that states and processes of the mind are identical to states and processes of the brain, (J. J. C. Smart, "The Mind/Brain Identity Theory", *The Stanford Encyclopaedia of Philosophy* (Spring 2017 Edition), Edward N. Zalta (ed.), URL = <https://plato.stanford.edu/archives/spr2017/entries/mind-identity/>.).

[68] A hypothetical inhabitant of the planet Mars.

seemingly suggests is that complete physical knowledge is not sufficient for complete knowledge of phenomenal states. The argument was expressed in debates over the identity theory as discussed by Herbert Feigl and Paul E. Meehl in the 1950's (Stoljar and Nagasawa 2004: 7). Feigl was a founding member of the famous Vienna Circle[69] together with Friedrich Waismann, Moritz Schlick, Hans Hahn, Otto Neurath, Olga Hahn-Neurath, Viktor Kraft, Felix Kaufmann, and Kurt Reidemeister. These were "scientifically trained philosophers and philosophically interested scientists" (Uebel 2016: n.p.). And, Meehl was a renowned psychologist.

Feigl invites us to consider whether a complete explanation of the behavioural dispositions of animals or humans is something that can be formulated by reduction to primary physical laws (Feigl 1967: 139). And, added to that, whether if,

> the structures (initial and boundary conditions) of organisms can be described in purely ... [physical] … terms; then there is no need for the phenomenal terms (*ibid.*).

If we were then to consider a Martian's theories about our world, the point is that the Martian's theories, though from a different planet may be expressible in "notation (reflecting concept formation) utterly different from our basic physics – but his physics would be completely translatable into ours and vice versa" (*ibid.*). A question beckon;

> Now, […]: Is there something about human beings that the Martian does not (and never could) "know"? (*ibid.*)

Would the Martian's repertory of experiences – in the event that he has a repertory of qualities of immediate experience (i.e., if he not a mere robot) – be in any way similar to that

[69] Vienna circle was a group of early twentieth-century philosophers who sought to reconceptualise empiricism by means of their interpretation of then recent advances in the physical and formal sciences. Their radically anti-metaphysical stance was supported by an empiricist criterion of meaning and a broadly logicist conception of mathematics. They denied that any principle or claim was synthetic *a priori*. Moreover, they sought to account for the presuppositions of scientific theories by regimenting such theories within a logical framework so that the important role played by conventions, either in the form of definitions or of other analytical framework principles, became evident (Uebel, Thomas, "Vienna Circle", *The Stanford Encyclopaedia of Philosophy* (Spring 2016 Edition), Edward N. Zalta (ed.), URL = <https://plato.stanford.edu/archives/spr2016/entries/vienna-circle/>.).

of the inhabitants of our world (*ibid.*)? Would the Martian be divorced from any "acquaintance" with what our experience of (emotions) or "raw feels" feels like?

Feigl's (1958) thought experiment is an example in the literature of the knowledge argument in the sense that he opts to argue that there is nothing over and above physical knowledge necessary for the Martian to fully describe humans and their world. On the issue about human beings vis-à-vis Martians dichotomy, Feigl's physicalist perspective thus seems to imply that he actually thinks there cannot be anything about humans that the Martian does not (cannot eventually) know (Stoljar and Nagasawa 2004: 8). But, at the same time, it is clear from the question he raises that he suggests that there may be something about humans that Martians are not privy to, and in that case, such a thing would be a defeater of physicalism if it was true (*ibid.*). In this sense, Feigl's (1958) science fiction story would thus count as an early version of Jackson's knowledge argument.

3.3.3. Nagel's What-is-it-like-to-be-a-Bat[70]

In 1974, an article with the title "What is it like to be a Bat?" was published by Thomas Nagel. Since its publication, the argument has "trended" in literature and is a prominent feature in knowledge argument debates in philosophy of mind. Central to Nagel's paper is the characterization of the notion of consciousness as *what-it-is-like,* which is defined as "the salient but difficult to describe feature of a conscious state" (Platchias 2011: 51). Nagel's

[70] I find it remarkable that Nagel chose bats to anchor his renowned thought experiment. Steven Handel in an article, "The Explanatory Gap, Psychology, and Possible Limitations of the Scientific Method" states,

> [B]ats are so fascinatingly different than humans; they hang upside down most of the time, use echolocation, they are nocturnal, and most eat nothing but insects. Could a human ever convincingly claim that he knew what it was like to be a bat? Nagel didn't believe this was possible – I agree (2009: n.p.).

Bats seem to represent that which is so unlike us – from the above description their experience would sufficiently point to us; for instance, a distinctive lack of not possessing any requisite empathetic sense similar to theirs, they have a different point of view (*ibid.*).

claim is that there are two distinct, mutually irreducible points of view, the subjective point of view; (subjects of experiences) and objective point of view (observers of the physical world) (Nemirow 1980: 473). Remarking on Nagel's argument: Chalmers (2002) believes that,

> A major source of the difficulty is that standard explanations in science and philosophy are cast in objective terms, but consciousness is subjective by its nature. We might know all about the objective functioning in a bat's brain, but we still would not know what it is like to be the bat, from its own subjective viewpoint (2002: 197).

Nagel's article assumes a slightly different approach to what either Broad or Feigl earlier outlined. Nagel's article contains an illustrative example of bats as the foundation of his argument. For Nagel we might accumulate prowess in studying bats; understanding bats as subjects of conscious experience, but ultimately there is something about bats that we cannot objectively account for. A bat's experiences (subjectively) remain alien to us to share objectively. For example, we may know that bats "perceive by echolocation" (Kirk 2003: 75), but we will never be able to tell what they experience, because we cannot acquire a "bat's own point of view" (*ibid.* 75-76). In other words, Nagel (1974) focuses on what he terms "the subjective character of experience". He writes

> The fact that an organism has conscious experience at all means, basically, that there is something it is like to be that organism …fundamentally an organism has conscious states if and only if there is something it is like to be that organism – something it is like for the organism (Nagel 1974: 435)

This aspect of subjective experience is something that he maintains,

> is not captured by any of the familiar, recently devised reductive analyses of the mental, for all of them are logically compatible with its absence (Nagel 1974: 436).

Nagel (1974) therefore emphasizes that as human beings we can never know what the experiences of bats are; we are too dissimilar from them. So, using his terms, we will never know what it is like to be a bat (*ibid.*). As such, even if we knew everything there is to know 'from an objective perspective' about a bat's radar, certain facts about bats would remain

unaccounted for. We still would not know 'what it is like' to perceive an object in a similar fashion to what a bat does (Nagel 1974: 439). Simplified, Nagel's argument is directed at the dissimilarity between the subjective and the objective points of view.

To sum up, Nagel's (1974) articulation is that we are not privy to the subjective mental states of a bat (another subject). His example challenges the physicalist perspective that advocates for the view that everything can be captured from a scientific (physical), i.e. an objective point of view. For Nagel (1974), some facts can only be captured from a subjective view. In considering his discussion, it is therefore implicit that Nagel's argument gives a much weaker conclusion to what the ultra-reductive-physicalist proposes.

By making a similar argument to Feigl (1958) and Broad's (1925) albeit from a different perspective, the discussion of Nagel's (1974) notion of what-it-is-like and how that relates to the notion of qualia is important going forward for my thesis, as I will show when I discuss Jackson's (1982, 1986) knowledge argument. I would like to point out that these early versions of the knowledge argument have been accused of not being explicit arguments against physicalism and will briefly consider this claim and defend my decision to introduce them as precursors to the knowledge argument in the next section.

3.4. The Triad[71]: Towards Jackson's Invigorated Version

The three early versions of the "knowledge argument";

1) Broad's Mathematical archangel,
2) Feigl's Martian super-scientist, and
3) Nagel's bat

[71] By 'triad' I am referring specifically to Charlie D. Broad (1925), Herbert Feigl (1958) and Thomas Nagel's (1974) versions of the knowledge argument.

These three arguments are representative of what I have been referring to as "knowledge intuitions" and as such can be taken to be precursors to Jackson's knowledge argument.

To explain, Broad and Feigl's examples do not make it clear whether they consider either the super scientist or the Martian to be in a position to learn 'new' facts which it seems they may currently not know. In Jackson's case, this is the focus. So, the point is that Jackson's version of the knowledge intuition contains both a claim about complete physical knowledge and a claim about additional facts to be learnt. As Stoljar and Nagasawa (2004) conclude,

> we might say the polemical importance of the Mary example [Jackson] derives from the fact that it factors the knowledge intuition into two quite distinct claims – the complete physical knowledge claim, and the learning claim – and that acceptance of both claims amounts to acceptance of the knowledge intuition (Stoljar and Nagasawa 2004: 9-10).

Thus, for a knowledge argument against physicalism to be strong, it is important that it shows that an individual (1) knows all the physical facts there are to know; and, (2) despite (1) they might still be – or still are - lacking some factual knowledge of other facts concerning the human perceptual experience.

As for Nagel's bat example, which concludes that we cannot know what-it-is-like to be a bat, based on the interpretation that we are physically very different from the bat species, also misses out on making a strong conclusion since, this lack of knowing (on our part) about the what-it-is-like does not say anything about our potential (or lack of) to learn. Nagel, only (albeit very importantly), according to Evan Thompson, "argues that facts about what conscious experience is like for some creature are essentially connected to the subjective perspective of the creature" (Thompson 1992: 321).

As will become clear after I discuss Jackson's knowledge argument, there is a feature that unifies the three versions: that something in addition to physical knowledge, an experience of a specific form, can be identified in our experiences of the world. And in this sense, the

previous three examples are versions of the knowledge argument. However, what marks out Jackson's version, is that it goes one step further than just asking whether physical knowledge is enough to understand subjective experience. Jackson's version actually poses the question whether there is anything new to learn (identify) when we have all knowledge of a subjective experience. This is the distinctive feature evident in Jackson's knowledge argument. Therefore, Jackson's knowledge argument (1982, 1986) offers a more robust conclusion than the three examples discussed here do: the triad argue that something of a certain kind is left out; whilst for Jackson, physicalism is simply false. It may even be that there is a third aspect to the knowledge argument, viz., that it is about the possibility that conscious experience lies way beyond our understanding, "and perhaps beyond the limits of rational inquiry" (Stoljar and Nagasawa 2004: 2).

Let us now turn to Jackson's "prime version"[72] of the knowledge argument. First, the knowledge argument: Jackson (1982, 1986) argues that even if we knew all the physical facts about an itch as an example, we would not just by knowing the facts know *what it is like* to have an itch. We might be versed about the physical facts regarding an itch, but contentiously we would learn something new when we actually learn what it is like to experience an itch. Or is it contentious? So there goes Jackson's argument, there is a kind of knowledge – knowledge of *what it is like* – which is not part of knowledge of any physical fact. According to Katalin Balog (2012):

> Phenomenal descriptions feature phenomenal concepts that refer to token phenomenal experiences or phenomenal properties, i.e., *qualia*. Phenomenal experience is

[72] I refer to Jackson's (1982, 1986) version as the prime version of the knowledge argument, "prime" only when I compared it to all the earlier versions of the same argument as proposed by e.g. Broad, Feigl and Nagel who I discussed earlier. The knowledge argument is so called because it is based on an intuition that concerns knowledge: "[…], no amount of knowledge of a certain sort –a physical sort – is going by itself to suffice for the knowledge of a different sort, namely a phenomenal sort" (Stoljar and Nagasawa 2004: 2-3). For the knowledge argument it does not matter how it is formulated, the crucial aspect as in Jackson's version (that which makes it a knowledge argument), is that its inference draws from the premises that constitute or contain the knowledge intuition, which then concludes that physicalism is false.

> characterized by the fact that there is something *it is like* to undergo it, something one can normally introspect, e.g., there is something it is like to feel my body against the chair I am sitting in. Anti-physicalists conclude that phenomenal facts – e.g., the fact that I feel the pressure of the chair against my body right now – are absent in a purely physical world (Balog 2012: 1).

So, there are some facts that are not part of physical facts, "further facts over and above those facts that are available to physical science" (Cooney 2000: 347). Jackson presents two cases, Fred "the tomato sorter" and Mary "the ultra-brilliant scientist"; which for my thesis, aims at highlighting Jackson's property dualism, which is an argument in support of non-reductive physicalism (NRP), and argues that reductive physicalism (RP) is false. According to Stoljar and Nagasawa (2004) Jackson's argument is based on easily understandable premises and employs "an apparently impeccable argumentative structure" (Stoljar and Nagasawa 2004: 1). I do not necessarily agree with this assertion of a perfect argument (some find Jackson argument to be poorly expressed); however, I endorse and argue in his corner for non-reductive physicalism (NRP).

3.5. A Fortified Challenge against Reductive Physicalism (RP): Reminiscing on Fred and Mary

The current debate on the knowledge argument commenced earnestly in the early eighties; in vividly illustrative papers by Jackson, namely 1) "Epiphenomenal Qualia" (1982) and 2) "What Mary Didn't Know" (1986) respectively. Jackson argues that there is some aspect of the mental – the experience of what it is like to have sensations (the qualitative character of experience – qualia) that no amount of knowledge of the physical can explain. Thus, if one knows what an experience is like, one knows something which is not physical. Jackson applies thought experiments using the examples of Fred and Mary to conclude that

1) physicalism is false, and

consequently, that

2) qualia exist since they embody new knowledge.

In the 1982 paper, Jackson announces himself as a "qualia freak". Descriptively, a qualia freak refers to someone who espouses a non-physicalist theory of mind (Brandon-Mitchell and Jackson 2007: 130). In his 1986 work, Jackson formalised the knowledge argument (Chalmers 2002: 199), and solely looked at the well-known case of Mary without even an allusion to the case of Fred.

In the two articles, 1982 and its sequel 1986: (a direct response to Paul Churchland (1985) "Reduction, Qualia, and Direct Introspection of Brain States"); Jackson sets out the argument that aim to establish two things; to repeat,

1) that physicalism is inadequate, and

2) the existence of qualia.

These papers form the basis of what is now conceptualised as an "explicit" anti-physicalist challenge to (reductive) physicalism.

Jackson is a property dualist: his knowledge argument concludes that some features of our mental life (intrinsic aspects of our experience – the qualia) escape the physicalist theory. This suggests that Jackson believes that some form of dualism is true; a *limited* form though. For him only some aspect of our mental lives needs be non-physical. This leads us to *limited* dualism, his property dualism. In basic terms, what Jackson argues for is not that we are souls but that some properties (the mental properties) escape the physicalist story; that is, there are non-physical properties. Property dualism is the view that, while there is only one kind of substance (viz., matter), the matter referred to can have two kinds of properties (viz., physical and mental). But, it is an epiphenomenalism stating that the mental is somehow (usually viz., some concept of emergence) caused by the physical, while itself not having any causal power

over the physical (Robinson 2015: n.p.). Qualia for Jackson are epiphenomenal, they come in tandem with the activities of our brains, but themselves (qualia) have no causal power over the world, e.g. the painfulness of being in pain is not a physical property of any mental state. Nor are such aspects of what-it-is like-to-be in such and such state things that are causally efficacious. This means something is simply an accompaniment to something else, like heat given off by a computing machine makes no important contribution to the operation of the system with which it is associated (Heil 2004: 75). While not at all espousing substance dualism on the one hand, he, on the other hand, believes that physicalist stories about the mind cannot capture the qualitative features of experience, viz., *epiphenomenal qualia*. And thus, he challenges reductive physicalism (RP) with his knowledge argument in favour of property dualism.

3.6. Jackson's Version of Knowledge Argument

As stated above, Jackson seeks to establish the falsity of reductive physicalism (RP) by arguing for the fact that we have physical bodies and are located in a physical world, but that we also have a mental side to us. The mental side of us is construed as an "enormously complex construction and arrangement of the very same ingredients that make up our material natures" (Braddon-Mitchell and Jackson 1996: 3). For his purposes, Jackson,

> […] seeks to show that the material or physical story about us is not the complete story about us because it leaves out the sensory part, the 'redness of reds' part (Braddon-Mitchell and Jackson 2007: 134).

Jackson (1982, 1986) invites us to his inventive argument, a thought experiment based on the two cases about colour. Jackson (1982) presents two cases viz.

1) the imagined case of Fred, "someone who has the best colour discrimination on record" (Maslin 2001: 150) with a penchant for sorting red tomatoes so much so that

he experiences an extra colour to his colour spectrum experience as compared to other people, and

2) the case of Mary, the neurophysiologist with a vision that is monochromatic i.e., everything appears only in black-and-white to her.

I begin with the well-known case of Mary and then come back to the case of Fred.

3.6.1. The Case of Mary

The 1982 article "Epiphenomenal Qualia" presents the case of Mary the neurophysiologist who has achieved prowess as a scientist in a monochrome room. As stated earlier, it provides a classic reinvigoration and stronger version of the knowledge argument, when considered in light of the earlier examples of the knowledge intuitions outlined by Broad, Feigl, and Nagel among others.

According to Jackson; Mary, for some bizarre reason, has to research the world in a black and white room aided only by a black and white television receiver. As a specialist neurophysiologist of vision, we can supposedly assume, she has accumulated the most prodigious physical information she could possibly obtain during her research stint about "what goes on when we see ripe tomatoes, or the sky, and use terms like 'red', 'blue', and so on" (Horgan 2004: 303). During that period, she ascertains "everything that can be stated in physical terms about the physical processes that are in anyway relevant to colour vision" (Platchias 2011:34). Since Mary is so competent regarding the neural dynamics of seeing different colours, the concern therefore is,

> What will happen when Mary is released from her black and white room or is given a colour television monitor? Will she *learn* anything or not? *It seems just obvious that she will learn something about the world and our visual experience of it. But then is it inescapable that her previous knowledge was incomplete. But she had all the physical information. Ergo there is more to have than that, and Physicalism is false.* (*my italics,* Jackson (1982: 130).

As for the 1986 follow-up article "What Mary didn't Know", Jackson tweaked the argument; and presents what David Chalmers regarded as the formalization of the knowledge argument (Chalmers 2002: 199). The newer version is put across by Jackson as follows,

> Mary is confined to a black-and-white room, is educated through black-and-white books and through lectures relayed on black-and white television. In this way she learns everything there is to know about the physical nature of the world. She knows all the physical facts about us and our environment, in a wide sense of 'physical' which includes everything in completed physics, chemistry, and neurophysiology, and all there is to know about the causal and relational facts consequent upon all this, including of course functional roles. If physicalism is true, she knows all there is to know. For to suppose otherwise is to suppose that there is more to know than every physical fact, and that is just what physicalism denies. … It seems, however, that Mary does not know all there is to know [...] (Jackson 1986: 291).

The day Mary leaves the room, the experiment asks; say, on seeing a fire tender for the first time, she exclaims 'oh, that is a red truck'. The question is, has she learned new propositional knowledge[73]? Something she did not know before she left the room? One could say obviously she learns something about the way the world is and how she experiences a particular visual sensation. In that case, it would therefore appear true that Mary's previous knowledge was incomplete (she did not know all there is to know after all) (*ibid.*). That is despite the claim that she had *all* the physical information (*my emphasis* Horgan 2004: 303). Jackson therefore concludes that qualia elude the reductive physicalist theory. So, reductive physicalism is false.

Now to the case of Fred.

[73] In epistemology, there are three types of knowledge viz., personal, procedural and propositional. Personal knowledge or knowledge by acquaintance e.g., I know Hugh Masekela's music e.g., *Thuma mina* quoted by President Cyril Ramaphosa in his maiden SONA speech in February 2018; procedural/practical knowledge or knowledge how to do something (competence), e.g., I know how to drive a bakkie; and propositional knowledge also called factual knowledge or knowledge-that e.g., England won on boundary count the 2019 ICC World Cup played at Lord's in London. Primarily epistemologists are concerned with propositional knowledge; this philosophical tradition goes back to Plato who outlined the JTB (justified true belief) theory that was accepted as doctrine by philosophers for centuries. In 1963, Edmund Gettier threw a spanner in the works, with his now famous Gettier objections-counterexamples to the JTB analysis; he argued that JTB is not sufficient for knowledge.

3.6.2. The Discovered Fred

In the 1982 article and not its sequel (1986), Jackson presents what is called "Jackson's Fred" (Stoljar and Nagasawa 2004: 12). It is an equally illustrative exemplification of the knowledge argument. I concur with the observation Stoljar and Nagasawa (2004) put forward; "Jackson's Fred" is presented as the main argument with Mary's case presented "almost as an afterthought" (*ibid.*), however the case of Mary is now more well-known as compared the case of Fred. Spectacularly, in the 1986 article, "What Mary didn't know" the case of Fred is glaringly omitted.

Jackson (1982) conceives of Fred, a man discovered as having been born with peculiar eyesight, he is born with better colour vision than all other people on record. He is so good that if shown ripe tomatoes he can effortlessly, and with due consistence, separate them into equal groupings all the time (*ibid.*). The story states that even if the groups are scrambled Fred can discriminate and sort the grouping all-over, with complete consistency. Such good vision amazes people and they conclude that Fred can see at least one colour more than we are able to distinguish, viz., red_1 different from red_2 (*ibid.*).

> What kind of experience does Fred have when he sees red_1 and red_2? What is the new colour or colours like? We would dearly like to know but do not; and it seems that no amount of physical information about Fred's brain and optical system tells us [...]. We have all the physical information. Therefore, knowing all this is not knowing everything about Fred. It follows Physicalism leaves something out (*ibid.*).

In relation to Fred, Jackson seeks to demonstrate the existence of something that Fred knows that we do not know "tomatoes that look uniformly the same colour to us actually form two groups with different colours" (Maslin 2001: 151). That implies that reductive physicalism leaves something out, "namely what these colours look like to an experiencing subject who can discriminate" (*ibid.*). Jackson therefore argues that no amount of physical information about Fred's sight would be sufficient to tell us what Fred's visual experience of

supplemental shades of red is like. From Jackson's perspective we could even study Fred's colour spectrum, and discover how wavelengths affect his sight in a different way to our own and yet we will never know what the extra shade of red that he sees looks like to him,[74] or what it feels like for him to see that colour.

3.6.3. Mary and Fred: The Comparison

Jackson's (1982, 1986) presentation of the two thoughts experiments about Mary and Fred, bring out two closely related issues:

1) the existence of the qualia, and consequently,
2) the falsity of reductive physicalism.

The cases of Mary and Fred respectively are presented to show that there are non-physical facts or properties in the physical world. For Jackson there is a contrast between the phenomenal and the physical. Andrew Watters states that the cases,

> […] show that having all of the physical information about *colour*; including all of the information about physical history, physiology, behaviour, light waves, and the physical sciences fails to provide the information of what it is like for Fred and Mary to experience (see) colour. Given that *all* of the physical information cannot provide all of the information available, Jackson concludes that Physicalism is false and that qualia exist, for some information is not physical (*author's emphasis* Watters 2015: 36).

To recap, the assertion is that someone who purportedly knows all the physical facts about seeing red, yet still learns (experiences) a "new fact". The "new fact" would be *what it is like* to see […], a fire truck, extra red hued tomatoes, and so on (Kirk 2003: 81). As such it can be concluded that,

> there are facts over and above the physical facts, and since Mary's knowledge of brain mechanisms – all the material (physical) facts – is complete, the material facts are not all there is to conscious experience. Since even a *complete* neuroscience leaves out the

[74] *The Journal of Philosophy* Volume LXXIX, NO. 7, July 1982. "The inverted spectrum" by Sydney Shoemaker is one of the few articles that opts to deal with the case of Fred.

> facts of conscious experience, there must be something non-physical about conscious experience (*author's italics* Platchias 2011: 34).

Hence, the point is that if reductive physicalism (RP) were true, there would be no such fresh information acquired. Jackson thus concludes that reductive physicalism (RP) is false. Succinctly, Jackson's anti-physicalist stance remains important since it points out that there are facts that elude the reductive physicalist theory. Recall for Jackson, if physicalism was true, Mary *must* have had complete knowledge about seeing red even in her monochrome customised room. But Jackson's argument is that the brilliant scientist did not have complete knowledge, she lacked the subjective experience of what-it-is-like.

Having outlined the knowledge argument, with its basic idea of going as far back as Bertrand Russell's (1918), C.D. Broad's (1925), Herbert Feigl's (1958), and Thomas Nagel's (1974) to its most recent statement in Jackson (1982, 1986), the question to be asked is, how are all these arguments related? Tim Crane (forthcoming)[75] has summed it thus,

> […] Jackson in 1982 [was] opposing physicalism, as was Broad (in the name of 'mechanism'); but Russell draws no explicit conclusion about physicalism. Nor did Feigl and Nagel (at least in 1974) take their own 'knowledge arguments' to tell against the truth of physicalism. Feigl was defending a version of the identity theory, combined with the view that there are two kinds of knowledge of the mind-brain. Nagel's conclusion was that even though physicalism (materialism) is true, it is in a certain sense unintelligible to us (https://philarchive.org/archive/CRATKA).

The upshot of this survey regarding the knowledge argument is to highlight Jackson (1982, 1986) as novel and a more robust version of the knowledge argument, that is, it is "an improvement on earlier versions" (Stoljar and Nagasawa 2004: 16), or similar arguments that are in the literature[76]. As highlighted by Crane (forthcoming) Jackson's argument, "adds something new and clear which was not explicitly there in these predecessors",

[75] Crane, Tim (forthcoming). The Knowledge Argument is an Argument about Knowledge. In Sam Coleman (2019) (ed.). *The Knowledge Argument*. Cambridge: PhilArchive copy v1: https://philarchive.org/archive/CRATKAv.
[76] Howard Robinson (1982), *Matter and Sense: A Critique of Contemporary Materialism*, was also published with a version of the knowledge argument that involve sounds and not sight (colours).

(https://philarchive.org/archive/CRATKA); a similar point is also expressed by Stoljar and Nagasawa (2004). The novelty from Jackson's version is the conclusion of his argument, namely that reductive physicalism (RP) is false.

So, focusing on the mind as a metaphysical problem implies ontology and epistemology implodes into metaphysics (ontological physical information), which refers to "physical *facts* Mary knows concerning human colour vision" (*ibid.*), while acknowledging mind as an epistemological problem, acknowledges that there is something more to know about the mind than just its ontology. As such it is clear that Jackson's knowledge argument confirms his view as non-reductive physicalist (NRP), exemplifying property dualism[77].

Focusing on the knowledge problem specifically, I think there has not been adequate emphasis on the epistemological side of the mind-body problem debate; and an overemphasis on the metaphysical perspective, which for me is problematic; as suggested also by Zhao (2012). Mary in the room has two types of physical information:

1) complete *ontological physical information*, while

2) not having enough *epistemological* physical information.

[77] Zhao, Y. (2012) "The Knowledge Argument against Physicalism: Its Proponents and Its Opponents" in *Frontiers of Philosophy in China, Vol. 7, No. 2*: pp. 304-316 makes the same point as Jackson (1982) p. 127. According to Zhao, "Jackson's definition of physicalism does not include all positions which would normally be thought of as physicalist. Thus, Jackson's knowledge argument against physicalism is not as strong as he takes it to be: There are some kinds of physicalism that remain unscathed by his argument. For now, it is worth noticing a distinction between two different types of "physical information," as pointed out by Horgan (1984, p. 150), i.e. the difference between "epistemological physical information" and "ontological physical information." […] Jackson's ambiguous statement of "physical information" may leave room for weak versions of physicalism, for example, the sort of physicalism which grants that the pre-released Mary has complete ontological physical information while lacking certain epistemological physical information, and thus is compatible with the knowledge argument (Churchland 1985; Bigelow and Pargetter 1990; Loar 1990; Lycan 1990 and 1995; Pereboom 1994; Tye 1986). For simplicity I take Jackson's statement of physical information to be ontological" (Zhao 2012: 306).

Firstly, what constitutes an understanding of the nature of the physical as suggested by metaphysical propositions like "physical information"[78], is the focus for both reductive physicalists and "qualia freaks"[79] (Jackson 1982 in Ludlow, Nagasawa and Stoljar 2004: 39) alike, albeit for different reasons obviously. And, secondly the "*epistemological* physical information" refers to *knowledge* Mary has concerning facts about human colour (*author's emphasis* Zhao 2012: 306) over and above the physical knowledge she already had. The point that I seek to emphasize here is that Mary has complete "*ontologica*l physical information' and '*insufficien*t epistemological information', which suggests that two descriptions of the Knowledge Argument can be presented – hence my position, as pointed out earlier advocating for an epistemological as well as a metaphysical description. In my view, philosophers of mind pay little attention to the epistemology of mind, rather focusing (almost exclusively) on the ontological aspects of the problem.

In subsequent Chapters, I will then complement this discussion with an exposition of Jackson's knowledge argument and an investigation of the epistemological stance in Lewis' ability response to Jackson's knowledge argument in order to introduce and integrate my novel reply to Jackson: a reply which is a synthesis of the epistemological and metaphysical arguments and which I offer in Chapter six.

Returning to the issue in hand, namely, Jackson's knowledge argument against reductive physicalism (RP). The argument has elicited several replies; for example, David Lewis'

[78] There are problems with the physicalist thesis, exemplified by propositions like, "that all (correct) information is physical information" (Jackson 1982), since it is riddled with ambiguity on what exactly Jackson mean. This will be discussed in more detail later.
[79] Jackson calls himself a "qualia freak", and he explains what he meant, "I think that there are certain features of the bodily sensations especially, but also of certain perceptual experiences, which no amount of purely physical information includes. Tell me everything physical there is to tell about what is going on in a living brain, the kind of states, their functional role, their relation to what goes on at other times and in other brains, and so on and so forth and be I as clever as can be in fitting it all together, you won't have told me about the hurtfulness of pains, the itchiness of itches, pangs of jealousy, about the characteristic experience of tasting a lemon, smelling a rose, hearing a loud noise or seeing the sky" (Jackson 1982: 127).

ability hypothesis is among the replies to Jackson's anti-physicalist 'failed'[80] project. And, the ability reply is interesting from my point of view, because it makes a specific epistemological claim based on Gilbert Ryle's (1945; 1949) know-how and know-that distinction. In epistemology the distinction has been for a sustained period a "largely unquestioned feature of philosophical orthodoxy" (Cath 2019: 1).

3.7. Conclusion

In conclusion, I introduced the knowledge argument: an anti-physicalist argument in contemporary philosophy of mind. It is one of the frequently discussed arguments on debates about subjective experience. I explored two descriptions of the knowledge argument; viz., 1) metaphysical and 2) epistemological. I began by the epistemologically directed side followed by the metaphysically inspired description. In the second section which was two-pronged; firstly, I briefly outlined metaphysical problems in philosophy of mind, which I described under a unified label: *the quadruple metaphysical challenges of physicalism*, viz., 1) Subjective experience; 2) Free will; 3) Personal identity; and lastly, 4) Intentionality. I then attempted a historical survey of the "*knowledge intuition*", beginning in Bertrand Russell's logical atomism. Three precursors to Jackson's knowledge argument; C.D. Broad (1925), Herbert Feigl (1958) and Thomas Nagel (1974) were discussed in that order. Lastly, I explained Jackson's knowledge argument: 1) the case of Fred, and 2) the case of Mary.

In the following section, I intend to show how anti-Jacksonian sentiments from reductive physicalists quickly arose to challenge his non-reductive physicalism (NRP) over the past few decades. I assess some of the unabating debates about Jackson's thought experiment that have raged on over the years. As an argument challenging reductive physicalism (RP),

[80] My use of the word 'failed' needs to be understood merely as emphasizing Jackson's retraction in 1998. I do not at all feel that the inferential claims of Jackson's knowledge argument fail in terms of his property dualism. This point will be argued for in Chapter six.

Jackson's knowledge argument has accumulated great, and some not so great, replies. In their various dimensions, generally they fit into two groups:

1) criticisms of the argument and

2) in some cases, limited and qualified support.

My first port of call in the next Chapter will be to outline replies that have been given to the knowledge argument and work out how to place them into the above schema. I discuss 1) Robert Van Gulick (1999); 2) Martine Nida-Rumelin (2009); and 3) Philip Goff (2017). Van Gulick (1999) has four questions; Nida-Rumelin (2009), in her very useful survey on qualia, has seven categorisations, and Goff (2017) gives three kinds of responses.

Chapter 4: Introducing the Replies to Jackson's Knowledge argument

4.1. Introduction

In the last section the knowledge argument has been shown as manifesting in several versions e.g., C. D. Broad (1925), Feigl (1958) and Nagel (1974) are some notable early examples. Going forward I now only focus on the Jackson's version of the knowledge argument that "maintains that only some form of dualism can do justice to consciousness and qualia" (Cooney 2000: 9). Similarly, it will also be the case when I discuss replies to the argument; I am focusing on Jackson's version. Specifically, this is the case, because Jackson defends a form of property dualism when he attacks reductive physicalism (RP).[81] As a brief reminder, from Jackson (1986), Mary knew all the physical aspects of seeing colours, but she still did not know what it is like to have the experience of the colour. This implies that there is more in the world than just that which is physical. Hence, physicalism is false (Jackson 1986: 291). The knowledge argument has accumulated great mileage in the literature with several varieties of replies offered.

There are many possible ways of responding to what materialists have called "a serious threat to physicalism" (Van Gulick 1999: 462), the threat, referring to the enduring argument that is called the knowledge argument (Jackson 1982, 1986). In this section, I have two-pronged aims:

1) I seek to show how the various replies to Jackson's version of the knowledge argument have been categorised since its publication in the eighties; and

2) then I intend to revamp the replies into a new categorisation.

[81] According to Gertler (2005) "Jackson's conclusion is a dualism of properties, rather than of substances".

I would also apply a similar disclaimer to what Crane (forthcoming) has proposed for this section which discusses the many replies Jackson's knowledge argument has stimulated. Crane states,

> These [replies] have been effectively discussed in great detail in many places, and my aim here is not to present a full survey of these discussions. Rather, what I want to do is to identify what seem to me to be the essential features of the most common physicalist responses (https://philarchive.org/archive/CRATKA).

In terms of the first prong of my aim in this section, I consider the various replies to the knowledge argument. The knowledge argument has attracted many replies and as I will show in an extended presentation in subsequent sections, the replies have been grouped into distinct categories by different philosophers. My motivation for going into a rather lengthy presentation of these replies will be to highlight the mileage that the knowledge argument has garnered over the years as an unsuccessful challenger to reductive physicalism (RP). However, I would like to point out that due to voluminous amounts of work generated around the knowledge argument, it is impossible to discuss all the work that has already been completed. So, for this section, where I am concerned with the replies, I only focus on how Robert Van Gulick (1999), Martine Nida-Rumelin (2009) and Philip Goff (2017) have categorised the replies. As will become clearer when the categories of replies are explained, the different categorisations focus on two issues viz.,

1) the falsity of reductive physicalism (RP), and

2) the possibility of conscious/subjective experience (SE) (qualia).

These issues are fundamental for my thesis as has been pointed out earlier.

In order to situate the discussion, I will begin by outlining the works of three philosophers, mentioned above, who for me exemplify how the replies focus on (generally) two important issues. Their works will be presented as follows:

1) a series of four questions by Van Gulick (1999);

2) seven replies, each clustered according to a theme, in Nida-Rumelin (2009) and

3) the three kinds of response offered by Goff (2017).

The order of presentation is merely for organisation and not priority. The reason for choosing these three specific categorisations, whilst leaving many others is that, in my view, they all include a specific reply to the knowledge argument in their respective clusters of responses that offers a strong counter to the knowledge argument. I am referring here to the ability hypothesis. The ability hypothesis is a response to Jackson's (1982) knowledge argument. I discuss the ability reply in greater detail later in this chapter.

In terms of the second prong of the aim of this Chapter is a focus on a systematic revamp of the three clusters of responses above; aiming to put together a "new system", and I designate the new clustering of the replies with the following headings;

1) The doubts about the thought experiment,

2) The logic group,

3) The no-propositional knowledge group[82], and

4) The propositional knowledge group.

[82] The no-propositional knowledge group, as I call it, includes the ability hypothesis and the acquaintance reply.

I suggest this new system of categorisation because the other categorisations do not always distinguish clearly enough between replies in support of Jackson's attack on reductive physicalism (RP) and replies in defence of physicalism against Jackson. My focus in this section and coming section will be on designation 3), and specifically on the ability hypothesis[83], as I argue in this thesis that it is here where there is potential to actually turn a critique of Jackson's argument into support for his argument, if we consider other than just Western views of the core of the argument. There are two versions of replies that form the no propositional response:

1) the ability hypothesis – Nemirow (1980, 1990) and Lewis (1988);

2) the acquaintance hypothesis – Earl Conee (1994).

As I have just pointed out, my focus is on 3) because I argue in the next section that the ability reply is the best placed epistemological physicalist counterargument presented so far and can potentially be actualised by an African perspective (Wiredu's quasi-physicalism). Specifically, the ability reply is an epistemological counterargument that was proposed by Nemirow (1980, 1990) and Lewis (1988), and is categorised as a reductive physicalist defence against both Nagel's (1974) and Jackson's (1982) versions of the anti-physicalist knowledge argument. The other version of the "no-propositional knowledge group" to be discussed is a variant, called the acquaintance reply by Earl Conee (1994), which supports reductive physicalism.

In discussing these negative responses to the knowledge argument, I will focus on Lewis's (1988), and in limited instances, I will also refer to Nemirow's (1980; 1990) similar formulations of the ability hypothesis which defends reductive physicalism (RP). Nemirow's

[83] Ability 'hypothesis' and ability 'reply' will be used interchangeably to refer to the same view in this thesis.

(1980) version appeared in a book review of *Mortal Questions* (1979) as a critical response to Nagel's (1974), even calling Nagel's perspective "misdirected" (Nemirow 1980: 477): according to Nemirow (1980),

> [i]t leads to unwieldy and unavoidable metaphysical conclusions: we do not require subjective facts to do justice to the subjectivity of experience (*ibid*.).

Several objections to the ability hypothesis have been proposed – these were attempts to shore up Jackson's argument – notable among them, e.g., the works of Janet Levin (1990), Brian Loar (1990)[84], William Lycan (1996), and Michael Tye (2000) which I will discuss as the counterarguments to the ability reply. A delicate or a thin line will be manoeuvred here, these philosophers do not fit into clear cut groupings, rather in terms of some aspects of their arguments they actually fit into either supporting or criticising sides. Nevertheless, on the bulk of their content, I classify them as arguments against the ability hypothesis, and thus in at least broad support of Jackson.

Now beginning with a review of the general categorisations of the responses to Jackson that are in the literature. I begin with Van Gulick (1999).

4.2. Review of the Three Categorisations

Van Gulick organizes the replies around "a series of diagnostic questions about Mary" (1999: 462-463). He would elaborate his aim in retrospect, "I offered a set of diagnostic questions to sort the various ways in which one might part company with the argument's reasoning" (Van

[84] Torin Alter makes an interesting/poignant observation about this article published in 1990 titled "Phenomenal states", with some philosophers implying that this is Brian Loar's *locus classicus*, I think that is an acceptable take on the article; the article explicates and defends the old fact/new fact view and is often quoted; in the article Loar only cites Jackson (1982) as a footnote and does not make a specific discussion of the knowledge argument, I wonder why?

Gulick 2004: 366)[85]. He attempts to group the variety of critical objections against the knowledge argument by posing four investigative questions;

> 1) Does Mary in fact learn anything or gain any knowledge when she first experiences red?
>
> 2) What sort of knowledge does Mary gain? Is it strictly *know-how* or does it include new *knowledge* of *facts*, *propositions* or *information*?
>
> 3) Does Mary come to know *new facts*, *new propositions* or come to possess *new information*?
>
> And,
>
> 4) On what mode of individuating propositions does Mary learn a new proposition? (That is, what counts here as a new proposition?) (*author's italics* Van Gulick 1999: 463-464).

The second categorisation is offered by Nida-Rumelin (2009: n.p.) who in her survey, organizes the (mostly negative) replies around seven specified headings. I will follow her categorisation for ease of explanation and only as a guideline. Her categorization is as follows:

1) Doubts about the thought experiment;

2) Complete physical knowledge without knowledge of all the physical facts;

3) No-propositional knowledge 1: the ability hypothesis;

4) No-propositional knowledge 2: the acquaintance hypothesis;

5) The new knowledge/old fact view;

[85] Robert Van Gulick (1990) and reprinted (1999) was published with the title "Understanding the phenomenal mind: Are we all just armadillos?", a few years later he reviewed the article and the new version of the article was published in (2004) by Ludlow, Nagasawa and Stoljar; with a new title, "So Many ways of Saying No to Mary" and Van Gulick states, "some original distinctions may begin to blur a bit. Thus, I will follow the quick review with the relevant additions and extensions" (Van Gulick (2004) in Ludlow, Nagasawa and Stoljar (Eds.). (2004).

6) Variants of the new knowledge view/old fact view; and

7) The dualist view about the knowledge argument[86].

The third categorisation is by Goff (2017), who has organized the replies into three distinct kinds of replies. In his view the three distinct replies he gives "concede a little more to the argument while not quite conceding the falsity of physicalism" (Goff 2017: 66). The responses are as follows,

1) The no-compromise response – Mary learns nothing new when she leaves her black and white room,
2) Non-propositional responses – Mary learns something new when she leaves her black and white room, but what she learns is not propositional knowledge but know-how or knowledge by acquaintance,
And,
3) The new truth/old property response – Mary learns new propositional truths when she leaves her black and white room, but those truths are simply new ways of thinking about properties and states of affairs she already knew about while in her room (*ibid.*).

As alluded to earlier, the three categorisations focus on two key issues, firstly, they show how materialists have already provided well thought-out counterarguments to the knowledge argument, e.g. the ability reply. As I will show, the ability replies due to Nemirow (1980, 1990) and Lewis (1983, 1988) are influential and an important aspect of my proposed novel reply, even if my novel reply is positive and the ability reply, as it stands in Western literature, is negative. Secondly, the categorisations acknowledge those who want to strengthen the attack on the knowledge argument, i.e. the new truth/old property response. This response claims that physicalism is not refuted because what Mary comes to know on leaving the monochrome room is not a *new fact*, rather it is an *old fact* she already knew in the room, it is only appearing to her in a new facade. This second issue is also an important

[86] The dualist view will not be considered for this thesis.

reply, but it will not be discussed in detail, but only as a subsidiary reply, since my primary concern is to focus on turning the first issue (the ability hypothesis) into a positive reply.

4.3. Revamping the Categorizations

The next step will be to focus on revamping the categorisations presented above into a newer category. The new category has four subcategories, the first two categories are those against Jackson's anti-physicalist view, and the last two are those who defend Jackson's attack of reductive physicalism, indirectly. The structures are set as follows:

1) The doubts group: against Jackson and are those who express strong reservations regarding the validity of Jackson's formulation of the knowledge argument. They deny that Mary (the neurophysiologist) learns extra propositional knowledge.
2) The logic group: this refers to an argument against a specific form of functionalism[87], their view seems to critique Jackson. Their assertion is that one cannot justifiably deny a conclusion implied from the main premise of an argument.
3) The no propositional knowledge group: these are those who argue in defence of reductive physicalism (RP) against Jackson's anti-physicalist argument. At the core of their position is the assertion that Mary cannot make any new discovery of factual truths over what she has already accumulated in the monochrome room, and;
4) The propositional knowledge group: these could be labelled distant cheerleaders as they acknowledge that the knowledge Mary gains of red is propositional, however they do not really view it as 'new'.

As already pointed out, I will then focus on subcategory in 3), which is the ability reply and will exclude the acquaintance reply from further discussion. I will take the ability reply as an

[87] Functionalists states that mental states are identical to abstract (causal-) functional roles, from the perspective of identity theory: stating that mental states are identical to neurophysiological states and processes of the brain (Braddon-Mitchell and Jackson 1996:91), which makes functionalism a form of non-reductive physicalism (NRP).

unsatisfactory counterargument to Jackson's (1982, 1986) knowledge argument against reductive physicalism (RP): my position as discussed in Chapter three is that; I argue against reductive physicalism (RP), the view that reduces the mental to the physical but I am not against non-reductive physicalism (NRP), the view that mental particulars and states as wholly dependent on but nevertheless distinct from, physical particulars and states supervenience to describe the relation between mental and physical properties. The framework for such an assertion will be elaborated when I discuss some responses to the ability hypothesis later in this Chapter.

I suggest this new system of categorisation because the other categorisations do not always distinguish clearly enough between replies in support of Jackson's attack on reductive physicalism (RP) and replies in defence of non-reductive physicalism (NRP)[88] and I intend to make this distinction clear. I am sympathetic to Jackson's non-reductive physicalism (NRP) and, broadly, my argument seeks to strengthen Jackson's property dualism; I will expand on this position in Chapter six when I address the possibility of Wiredu's concept of mind turning the Western ability hypothesis into support rather than criticism of Jackson's argument.

I begin the next section with a discussion of those who impugn Jackson's (1982) thought experiment, I categorise their replies as the doubt responses.

[88] See Chapter two, where I discussed reductive physicalism (RP) and non-reductive physicalism (NRP); as noted, Jackson is an example of a non-reductive physicalist.

4.3.1. Doubts about the Thought Experiment

"The doubts group", includes those philosophers who have expressed reservation regarding the validity of Jackson's (1982, 1986) formulation of his knowledge argument. In the literature, examples are, Evan Thompson (1992), Daniel Dennett (1991, 2007), and Paul Churchland (1989) among others. At the core of the doubt's group's reply is the physicalist denial that Mary learns anything extra, over and above the knowledge of everything physical that she already possesses, when she emerges from her monochromatical state. This group is therefore against Jackson's attack on reductive physicalism (RP). The doubt they express concerns the validity of the inference drawn from an assertion that Mary should then surely be able to figure out colour effortlessly once she is in a polychromatic environment (Nida-Rumelin 2009: n.p.). Recall: "the knowledge argument shows that any scientific explanation must, in principle, be incomplete because it will always leave out the qualitative features of conscious experience" (Thompson 1995: 263), in other words, the argument claims that there are truths about consciousness that cannot be deduced from complete physical knowledge. In this group their stance arises from the premise in Jackson's argument, where we are told *ex hypothesi* that Mary knows *everything physical* there is to know about human neurophysiology when humans experience a particular colour e.g., looking at a fire extinguisher. We are then confronted by a question; can such an inferential claim even be hypothetical, "to know everything"? To explain, I limit myself to the three examples mentioned above, starting with Thompson.

According to Thompson (1992) in "Novel Colours" the knowledge argument is unfortunately, overtly "poorly described" (1992: 322) and cannot be performed. I have already described in earlier sections the stories of the two perceivers Fred and Mary as the vehicles Jackson utilises to formulate and express the incompleteness of neurophysiological

explanation when it comes to perceptual features of phenomenal conscious experience. Fred reputed as the best tomato sorter ever with an exceptional colour identifying capacity: he has at least one more colour perception than us. Mary's vision is supposed to be like ours, with the only exception being that she has been confined in a monochrome environment for a long period. Let's focus on the case of Mary; however, my remarks apply, *mutatis mutandis*, to the case of Fred.

In terms of his concern with regards to poor description, Thompson argues that surely, if Mary's vision is like "ours", merely confining Mary to a monochromatic environment will not prevent her from *colour experiences* (*my italics* Thompson 1992: 322). For example, Mary; "(1) will see colours when she rubs her eyes and (2) when she dreams; (3) she will also see colour afterimages induced as a result of brightness and lightness perception" (*ibid.*). It can be hypothesised that as part of a normal life routine, we normally can imagine such instances to be possible: (1), (2) and (3), with the only exception that in her case the ability may atrophy because of prolonged confinement. Thompson (1992: 323) says he is not arguing for or against physicalism; but he expresses doubt as a means to solicit clarifications for Jackson's knowledge argument (*ibid.*), so that it can become possibly believable. As a passing remark, thought experiments are not meant to be scientific enterprises with empirical results similar to what happens, for example, in physics or chemistry. But, I agree with Thompson (1992) on this point where he goes on to state,

> Doing the science does not mean abandoning the philosophy, but it does mean that our philosophical explorations should not involve unconstrained thought experiments and unargued appeals to intuitions about mysterious properties (1992: 345).

I however do not see how the doubt he expresses attacks NRP necessarily or convincingly, although it does weaken Jackson specific argument.

The second example of the doubts group I briefly want to touch on, is the view expressed similarly by three philosophers Paul M. Churchland, Daniel Dennett and Phillip Goff respectively. Churchland (1989) in "Knowing Qualia: A Reply to Jackson (with postscript 1997)", addresses the replies that Jackson (1986) "What Mary didn't know" offered in reply to Churchland's (1985) "Reduction, Qualia, and the Direct Introspection of Brain States"[89], which offers a critique of Jackson's (1982) "Epiphenomenal qualia" and dovetails with Dennett's (1991) in *Consciousness Explained*. These two, Dennett and Churchland, quibble about what emanate from the claims given by Jackson (1982, 1986). They complain that we are told Mary will be able to figure out or learn something new when in a polychrome environment, because she knows *everything physical* there is to know about visual colour experiences. Considering our current view of how science works this is really *a big* claim to make according to them. According to Neil Campbell (2003),

> At most we can imagine [Mary] knowing a great deal, but this falls far short of *everything*. Given this, our willingness to accept Jackson's premise that Mary learns something new after her incarceration probably stems from our initial failure to imagine properly what such a person would know (*author's italics* Campbell 2003: 264).

Forthright in interrogating such a claim; are Churchland, Dennett and Goff who all have concerns regarding such a far-ranging claim. Goff (2017) in *Consciousness and Fundamental Reality*, argues against physicalism: the view that the world is fundamentally physical in nature, in a similar way to Churchland and Dennett; Goff thinks it is difficult to conceive such a possibility of Mary knowing everything physical that could be known. Though these

[89] In this article "Reduction, Qualia, and the Direct Introspection of Brain States" Churchland (1985) addresses three antireductionists' arguments or qualia-based arguments posed by Thomas Nagel (1974), Frank Jackson (1982), and Howard Robinson (1982). He views them to be "unsound arguments" (1985:56), as they have "shortcomings" (*ibid*. 62); while his book chapter "Knowing Qualia: A reply to Jackson" in Paul M. Churchland's (1989) *A Neurocomputational Perspective: The Nature of Mind and the Structure of Science*, addresses only Jackson in an extended discussion and as a sequel to the issues raised in his 1985, which is also a chapter in his 1989 book. I will therefore focus on exclusively on Churchland 1989 as it offers a more detailed discussion of the issues.

three philosophers aim only at clarifications of how Jackson has set up the argument, they nevertheless do not agree with Jackson's NRP.

Churchland (1989) has argued that the claim that Mary "knows everything physical there is to know […]" (Churchland 1989 in Ludlow, Nagasawa and Stoljar 2004: 163), does not exhaustively show the grounds of implying anything new Mary will be able to figure out or learn will be non-physical when in a polychrome environment, despite her command of neuro-scientific knowledge; accordingly opening Jackson's thought experiment to reasonable doubt. Churchland says "Jackson has surely profited from ambiguities […] nothing whatever has been accomplished" (*ibid*. 177). Jackson (1986) in reply, concedes that the way he sets up the argument could have been different, however, the point he seeks to insist on, is that Mary knows all physical matters (about brain-states and their properties), but she does not have knowledge of the phenomenal property, the "quale" red. The thrust of his claim remains undefeated, "Mary would not know what the relevant experience is like" (Jackson 1986: 295), something that she can only learn when she experiences colour for the first time, something which is extra to her knowledge of the physical.

Dennett (1991) believes it is just unimaginable to hold such a view; *she knows everything physical*. He therefore postulates that in the place of such a big claim; maybe the thought experiment should be tweaked so that it is merely understood as opining that Mary has "bucket loads" of information (Dennett 1991: 399). Dennett's position is to reject an intuition that she learns nothing new; it is inconceivable that she learns *nothing* new when exposed to the new environment considering our general view of science. But, crucially, what she learns does not have to be non-physical as the experiment, according to him, seems to misrepresent how science works. As we know, science is limited; so, the experiment has not shown that we

cannot with certainty exclude that she gains some new *physical* knowledge even if the thought experiment claims she knew everything physical, as that is simply not possible.

Similarly, Philip Goff (2017), benefitting from Dennett (1991), asks, "Is it possible to know everything physical there is to be known … down to the level of fundamental physics?" (Goff 2017: 67). In his view "it's not necessary to hold that Mary knows *all* the physical tiniest truths" (*ibid*.). Jackson's point is directed only at showing that we know a fair lot from neuroscience, "one might know all physical facts, and yet be ignorant of some domain of these nonphysical qualia" (Churchland 1989: 6); there are non-physical properties, and reductive physicalism (RP) as we are aware cannot explain such phenomenal states, but that does not necessarily imply that no new physical facts can be known too.

The third instance of this "doubts group", e.g. Hardin's[90] (1988) view, argues that "Mary would recognize the colours when first seeing them on the basis of her complete physical knowledge about colour vision" (Nida-Rumelin 2009: n.p.). According to this assertion of doubt of the success of Jackson's attack on reductive physicalism (RP), Mary would not be susceptible to Dennett's (1991) 'blue banana' trick. I will not go into a detailed discussion of this instance of doubt; I only introduce it as another attempt to undermine the knowledge argument. A "blue banana" is an expression coined by Dennett[91] in an attempt to bring out what he calls "the illusion of imagination" (Dennett in Ludlow, Nagasawa and Stoljar 2004: 60). The illusion of imagination[92] is a part of Dennett's attempt to correct the story of Mary; he writes,

[90] For a detailed discussion see the work of C.L. Hardin's *Colour for Philosophers*: *Unweaving the Rainbow* 1988, 1992.
[91] Daniel Dennett coined the term in the first of his public critiques of philosopher John Searle's famous Chinese Room thought experiment (Searle, 1980; Dennett, 1980).
[92] For a detailed discussion of Dennett's presentation and arguments involving the blue banana trick arguments, see Dale 1995.

> And so, one day, Mary's captors decided it was time for her to see colours. As a trick they prepared a bright blue banana to present as her first colour experience ever. Mary took one look at it and said "Hey! You tried to trick me! Bananas are yellow, but this one is blue!" The captors were dumbfounded (*ibid*.).

The blue banana trick attempts to highlight what Dennett believes is the flaw in Jackson's thought experiment and aims especially at the claim that "[i]t seems just obvious that she will learn something about the world and our visual experience of it" (Jackson 1982: 130). Dennett's doubt aims at establishing whether it is plausible that Mary can possess all the physical information possible regarding colour, so that she will be not *surprised* when she finally sees red things. According to Dennett, Jackson's claim is mistaken; hence, he believes that Jackson's presentation of his knowledge argument was "a bad thought experiment, an intuition pump[93] that actually encourages [the uninitiated] to misunderstand its premises!" (Dennett 1991: 398). However, in recent years, Dennett (2006) "What RoboMary Knows" has agreed that his counter example incorporating a blue banana has also not been so astute, "I underestimated the allure of this intuition pump by a wide margin. So, I am returning to the fray, […] at a more deliberate pace […]" (Dennett 2006: 106), meaning (I suspect) he wants to make another attempt at outlining his opposing position. His position has been that it is implausible to assume that Mary can have such "complete physical knowledge about colour vision" (Nida-Rumelin 2009: n.p.).

In sum, I have briefly outlined three instances of doubts that sought clarifications regarding how Jackson sets out his argument; I looked at 1) Hardin's (1988) view; 2) Goff (2017), Dennett (1991) and P. M. Churchland (1989)[94]; and 3) Thompson (1992). Though they aim only at clarifications of how Jackson has set up the argument, nevertheless they do not agree

[93] Intuition pumps, are "little stories designed to provoke a heartfelt, table-thumping intuition – Yes, of course, it has to be so! – about whatever thesis is being defended" (Dennett 2013: 5-6). According to him, they are meant as thought experiments that appeal to ideas that are hypothetically so evident as to render their conclusion to be obvious (*ibid*.).
[94] Going forward only Churchland: there are two philosophers in philosophy of mind, Patricia Churchland and Paul Churchland (eliminative materialists) in this thesis I refer to Paul Churchland.

with Jackson's NRP. While it would seem that Churchland and Dennett's counterarguments are in support of the claim that perhaps in some limited way Mary could have "figured out" which things are red; I am not worried about that seemingly obvious position based on two reasons: one,

1) The question is whether she knows what it is like to see red, not which things are red.

And,

2) Does she know it simply in virtue of knowing all the functional and physical facts about colour vision?

The next category refers to an argument against some specific form of functionalist responses. For reason of scope I will not focus on this objection, I only introduce it, for the sake of thoroughness.

4.3.2. The Logic Group

This second category of reply contains what I have termed "the logic group", including Terence Horgan (1984)[95], Gilbert Harman (1990)[96], Owen Flanagan (1992)[97] and Torin Alter (1998).[98] They seem to critique Jackson. In general terms, this group asserts that one cannot deny a conclusion implied from the main premise that have been given as true in an argument, e.g.

1) Mary has complete physical knowledge about human colour vision.
2) Therefore, Mary knows all the physical facts about human colour vision.

Harman (1990) has expressed reservations on this reasoning and has argued that Mary in the thought experiment is not shown as knowing all the functional facts concerning human colour

[95] Horgan, T. (1984), "Jackson on Physical Information and Qualia". *Philosophical Quarterly* 34. pp.147-52.
[96]Harman, G. (1990). "The intrinsic quality of experience" *Philosophical Perspectives*.
[97] Flanagan, O. (1992), *Consciousness Reconsidered*. Cambridge: M.I.T. Press.
[98] Alter, T. (1998), "A Limited Defense of the Knowledge Argument", *Philosophical Studies* 90, pp. 35-56.

vision, apparently, she lacks the concept of what it is for an object to be a certain colour e.g., red.

This group further argues that functionalism[99] may actually be able to have a positive response to dealing with phenomenal knowledge, that is to say, "it attempts to explicate the nature of mental states in a non-mentalistic vocabulary" (Maslin 2001: 143) and that Jackson does not acknowledge this possibility. For example, Harman (1990) says he argues against Jackson on the basis that his 1982, 1986 arguments are purportedly meant to demonstrate that functionalism cannot account for this aspect of experience (Harman 1990: 33). Functionalism is the doctrine that,

> every mental state-type may be fully defined by means of its typical causal connections to sensory stimulation, behaviour, and other mental state-types similarly defined. Some philosophers, […], believe that although functionalism is plausible as regards certain aspects of mentality, nevertheless there is one aspect that is incapable, in principle, of being analysed functionally: viz., the qualitative, or phenomenal, content of our mental states – i.e., what it is like to undergo these states (Horgan 1984: 453).

As I have pointed out earlier, for reasons of scope, I am not focusing on functionalist approaches here.

I now move to my third category which is a reductive physicalist response (also epistemologically inspired, Ryle's legacy): the writers in this group accept that Mary gains new knowledge, but their critique is about rejecting the assumption that the phenomenal knowledge added is propositional knowledge, in other words, their argument is concerned with the type of knowledge that Mary gains. For them what is added is capacity or ability, knowledge-how, not knowledge that.

[99] As an alternative theory mind functionalism "characterizing mental states in terms of their causal and relational properties" (White 1986: 333), faces competing theories like dualism, reductive physicalism (RP) and behaviourism.

4.3.3. No-Propositional Knowledge Group

The third category represents what I would call "hardcore" physicalists, they include Laurence Nemirow (1980, 1990)[100], David Lewis (1983, 1988)[101] and Earl Conee (1994)[102]. These are physicalists who argue in defence of reductive physicalism (RP) against Jackson. I name them the "no propositional knowledge group", since they are not in defence of subjective experience as new facts. The "no propositional knowledge group" brings together a robust response against Jackson's anti-physicalism (property dualism) and has actually been offered in two versions 1) the ability reply[103] and 2) the acquaintance reply. The ability reply entails two versions: one prong as outlined by Nemirow (1980, 1990) and Lewis (1983, 1988) as the popular version, which argues "… that at most Mary gains a new *ability*" (Chalmers 1996: 144), i.e., she gains ability (expertise) as differentiated from factual (propositional) knowledge. I focus on the ability reply in Chapter six, especially on Lewis's version and to a limited extent Nemirow[104]. These two, Nemirow and Lewis, offer variant versions of the reductive physicalist defence against Jackson's attack on reductive physicalism (RP). In my view, Lewis's reply as an epistemological response (based on the *knowledge that* and *knowledge how* divide)[105] to the knowledge argument is ideally suited to be reinvigorated to offer support to Jackson's property dualism, as I will explain later, especially in Chapter five.

[100] Nemirow, L. (1980). "Review of *Mortal Questions* by T. Nagel" and Nemirow, L. (1990). "Physicalism and the Cognitive role of Acquaintance".
[101] Lewis, D. (1983). Postscript to "Mad Pain and Martian Pain" and Lewis. D. (1988). "What Experience teaches".
[102] Conee, E. (1994). "Phenomenal Knowledge". *Australasian Journal of Philosophy 72*: pp. 136–150.
[103] In the literature, the bandwagon of philosophers in philosophy of mind whose arguments have benefitted from this epistemological divide have grown in number over the years e.g. Lewis, Chalmers, Papineau, Tye, Alter, and so on.
[104] According to Bence Nanay (2009), "the ability hypothesis has become a fashionable reply in philosophy of mind because it could be used to counter the knowledge argument […]" (Nanay 2009: 700), such a view is in my understanding the general applicable and acceptable position. However, I have a different reading in mind from Nanay, who seeks to "remain neutral about the anti-physicalist knowledge argument" (2009: 701). I seek to position the ability hypothesis not as a counter to the knowledge argument but rather read it as a fortifying Jackson's property dualism when co-opted with Wiredu's quasi-physicalism as will become clear in chapter five. For now, I will only outline generally accepted views of Nemirow and Lewis, respectively.
[105] This goes back to the work of Gilbert Ryle (1945; 1949), I will discuss the distinction below.

The other not so popular version of the "non-propositional group" is the acquaintance reply, and is credited to Conee (1994), who believes "that knowledge consists in acquaintance with the experience" (1994: 136). Conee (1994) argues that Mary makes epistemic progress when she gets acquainted with the red hue for the first time. Though Conee's (1994) acquaintance reply is also against the knowledge argument and in support of reductive physicalism (RP), I will not go into detail about this variant, as the focus is on the ability reply given the possibility of turning it around, which will be discussed in Chapter five.

In combination the reductive physicalists in the no propositional knowledge group argue that Mary cannot discover any new factual knowledge over and above what she has already learned in the monochrome environment. For them she, "merely acquires a new representational or imaginative ability" (Maslin 2001: 154). The bottom line is that for this group definitely Mary learns something *newish*. The issue is what type of *newish* knowledge does she gain? Does her acquiring something *newish* constitute learning new propositional knowledge or not? There are two parallel issues: 1) if not, then the ability responses safeguards reductive physicalism (RP), 2) if she acquires new knowledge then reductive physicalism (RP) fails since the default position for reductive physicalism (RP) is to say Mary does not make any new discovery (Chalmers 1996: 144). The ability reply denies that Mary acquires propositional knowledge once she ventures out into a multi-chromatic environment. Instead, the reply argues that she acquires knowledge of how (knowledge of the mental) to recognize colour and to imagine colour experiences, which are things she previously lacked (Burwood *et al*. 1999: 119).

Returning to the version of the ability reply by Nemirow and Lewis; let us begin by considering Nemirow (1980) who formulated the earliest version of the ability reply as Lewis

(1983)[106] acknowledges. The version due to him was crafted in a book review of Nagel's (1979) *Mortal Questions*. The version actually predates Jackson's knowledge argument; the point made was in connection to a version of Nagel's "knowledge" argument: about the existence of subjective facts. For Nemirow (1979), Nagel (1979) assumes,

> […] understanding an experience consists in grasping facts about the experience […] from the point of view of the experiencer [meaning] there are facts about the experience which are understandable only from the experiencer's point of view […] subjective facts (Nemirow 1979: 475).

For Nemirow, he argues that Nagel's "understanding of understanding is too naïve" (*ibid.*) since in his view Nagel fails to grasp that "some modes of understanding consist, not in the grasping of facts, but in the acquisition of abilities" (*ibid.*). The view that Nemirow advocates concerns understanding an experience as "an ability to place oneself, at will, in a state representative of the experience" (*ibid.*). In that way, one can speak of understanding the experience on the basis that they can effortlessly "remember a similar experience, or (at least) be able to imagine" (*ibid.*), in other words to visualise the past experience. Hence, Nemirow concludes,

> Now it is perfectly clear why there must be a special connection between the ability to place oneself in a state representative of a given experience and the point of view of the experiencer: exercising the ability just is what we call 'adopting the point of view of the experiencer'. (Visualizing red *is* what we call "adopting the point of view of one who sees red.") We can, then, come to terms with the subjectivity of our understanding of experience without positing subjective facts as the objects of our understanding. This account explains, incidentally, the linguistic incommunicability of our subjective understanding of experience (a phenomenon which might seem to support the hypothesis of subjective facts). The latter is explained as a special case of the linguistic incommunicability of abilities to place oneself at will in a given state, such as the state of having lowered blood pressure, and the state of having wiggling ears (1980: 475-476).

Nemirow (1990) tweaked his 1980 version in an article "Physicalism and the Cognitive role of acquaintance", and calls it "the ability equation" (Nemirow 1990: 492). Summarised, it

[106] Lewis (1983) clearly credits the general idea of the ability hypothesis to this version by Nemirow (1980) as the precursor of his own statement on the view.

states "knowing what it's like may be identified with knowing how to imagine" (1990: 493). For this latest version Nemirow (1990) makes use of a correlation provided from Nagel's theorizing, i.e. he retains an analysis of Nagel's *what is it like*[107] for an experiencer, and importantly for me, adds an engagement with Jackson's (1982) knowledge argument against physicalism. Nemirow argues that the knowledge argument (in this case he refers to both Nagel and Jackson) "rests on shaky inference" (1990: 492), which I think is an assertion he makes hastily. My quibble towards Nemirow relates to the idea of knowing what it is like invokes a notion of subjectivity (the aspect of actually being the experiencer, not just imagining it – see below), i.e. the state of being able to control auricular muscle movements to wiggle one's ears. One can ask is this kind of knowledge attainable as an objective fact? If not, can the physicalist defend such knowledge since it would seem to go against physicalism?

According to Nemirow as pointed out earlier "knowing what it's like may be identified with knowing how to imagine" (Nemirow 1990: 493). This ability equation raises a problem, Bence Nanay articulates it as follows (*author's emphasis* 2009: 702),

> The problem with this [equation] is that if I have wild enough imagination, I can imagine having pretty much any experience, including that of being a bat. Of course, I may be completely wrong and imagine experiences incorrectly. But the ability to imagine having experience E incorrectly is unlikely to constitute the knowledge of what it is like to have experience E. Knowing what experience E is like, if it is to be analyzed as having the ability to imagine, seems to imply the ability to imagine having experience E *correctly*. Thus, the ability to imagine having experience E is not sufficient for accounting for knowing what experience E is like. We need something more.

[107] According to Daniel Stoljar and Yujin Nagasawa (2004: 25), "[t]he prominence in contemporary philosophy of the phrase 'what it is like' is owing to Nagel 1974, but as far as we are able to judge, the phrase was originally used, in the context of phenomenal consciousness, in Wittgenstein's *Remarks on the Philosophy of Psychology*, Vol. 1, (University of Chicago Press, 1980) which dates from 1946-7. (A comparable usage is Farrell 1950). At §91, Wittgenstein writes: "The 'content' of experience, of experiencing: I know what tooth-aches are like, I am acquainted with them, *I know what it's like to see red, green, blue, yellow, I know what it's like to feel sorrow, hope, fear, joy, affection…". (It is interesting to note that the material following the asterisk was written by Wittgenstein in English rather than German.)"

Nanay's (2009) worry is about "interpretations" (2009: 703) to this representative formulation of the ability equation by Nemirow (1980, 1990), repeated as "knowing what an experience is like is the same as knowing how to imagine the experience" (1990: 495). Nanay argues

> We have seen that if we want to identify knowing what it is like to experience E with having the ability to imagine, we have to *specify* what it means to imagine an experience correctly (*my italics* Nanay 2009: 705).

In my view, failure by Nemirow to clearly demarcate and specify an understanding of knowing how and his understanding of ability (to imagine) limits his response to the knowledge problem. As a result, the striking response is what Lewis has offered[108], which goes beyond only imagining experiences; Lewis (1988) adds other mental states viz., remembering and recognizing the experiences (as other abilities): I explain Lewis's version immediately.

And now to the more popular version of the ability reply, which is defended by David Lewis (1988) who formulated a defence of reductive physicalism (RP) using a view that he labelled the ability hypothesis. Lewis's formulation is specifically against Jackson's knowledge argument[109] against non-reductive physicalism. According to Lewis (1988) the new experience gained is only the ability to imagine, recognize, and remember experiences; in other words, it is expertise (*knowing how*), not factual or propositional knowledge (*knowing that*). (Lewis acknowledges Nemirow for part of this formulation).

[108] Bence Nanay would not agree with my assertion that Lewis's response is striking, in his view Nemirow, Lewis and D.H. Mellor's versions of the ability hypothesis, he labelled as AH1, AH2 and AH3, in his view, "(AH2) and (AH3) need to be discarded: we are back with (AH1). But we have seen that (AH1) in itself will not do […]" (Nanay 2009: 704-705). He suggests: "the ability to discriminate" (Nanay 2009: 705): "knowing what it is like to experience E is having the ability to distinguish imagining or having experience E from imagining or having any other experience" (*ibid.*). The scope of my argument does not cover this comparative analysis of the different versions of the ability hypothesis, I rather aim at consolidating what Nemirow and Lewis has offered.
[109] In chapter 6, as I have already mentioned, I will revisit this point; I will show how I hope to apply Lewisian argument (ability reply) positively when I argue that it can potentially work with Wiredu's interpretation of the Akan quasi-physicalist view.

Gilbert Ryle (1945; 1949) has made prominent this epistemological distinction. In 1945, in his capacity as the President of the Aristotelian Society, Ryle delivered a ground-breaking speech that would eventually be published in the *Proceedings of the Aristotelian Society* (1945-1946) titled "Knowing How and Knowing That: Presidential Address". Nearly half a decade later, as Chapter two of the book, *The Concept of Mind*, the reworked article, with a similar title "Knowing how and Knowing that" was published. The epistemological paper discusses that at least there are two types of knowledge: "two types of states ascribed by knowledge ascriptions" (Snowdon 2003: 1), that can be identified: on the one hand, as *knowing that* (propositional or factual knowledge), and the other, as knowledge which is ascribed in the *knowing how* construction (practical knowledge) (*ibid.*), and that they be taken as distinct concepts. In Chapter two of *The Concept of Mind*, Ryle (1949) sets out the discussion as follows:

> There are certain parallelisms between knowing *how* and knowing *that*, as well as certain divergences. We speak of learning how to play an instrument as well as of learning that something is the case; of finding out how to prune trees as well as of finding out that the Romans had a camp in a certain place; of forgetting how to tie a reef-knot as well as of forgetting that the German for 'knife' is '*Messer*'. (*author's italics* Ryle 2009: 19).

In current epistemological debates, the issue is debated in terms of practical knowledge and propositional knowledge: "know-*how*" and "know-*that*", e.g. to ride a bicycle is know-*how*, while to know that Pretoria is the capital city of the Republic of South Africa, is propositional knowledge or know-*that.* The debate has become very influential in epistemology,

> Knowledge-how and knowledge-that are distinct kinds; to know how to do something is not just to know the right facts about how to do it, and to exercise knowledge how - you need not first implicitly or explicitly consider a fact about how to do it. (Fantl 2012: n.p.).

Turning to contemporary philosophy of mind, the concepts knowledge *how* and knowledge *that* have stimulated debates that feature prominently in this philosophical discipline. Note,

the debate regarding the distinction, though incubated following Ryle's formative outline in epistemology, is now an important aspect of the knowledge argument debate in contemporary philosophy of mind, and it is particularly evident in replies to Jackson's knowledge argument. In current philosophy of mind, the majority position is that there is a considerable chasm between the concepts, *knowledge how* and *knowledge that*. I will explain this debate in terms of the knowledge argument in the next section. As stated earlier, and is commonly accepted, the ability reply, benefits on this epistemological distinction between the two types of knowledge; *knowledge how* and *knowledge that*.

Lewis (1988) applies this creative adaption of an epistemological discussion to contemporary philosophy of mind. According to Lewis,

> If you have a new experience, you gain abilities to remember and to imagine. After you taste Vegemite, and you learn what it's like, you can afterward remember the experience you had. By remembering how it once was, you can afterward imagine such an experience. Indeed, even if you eventually forget the occasion itself, you will very likely retain your ability to imagine such an experience. Further, you gain an ability to recognize the same experience if it comes again. If you taste Vegemite on another day, you will probably know that you have met the taste once before (2004: 98).

He states,

> [t]he ability hypothesis says that knowing what an experience is like just ***is*** the possession of these abilities to remember, imagine, and recognize. It isn't the possession of any kind of information, ordinary or peculiar. It isn't knowing that certain possibilities aren't actualized. It isn't knowing-that. It's knowing how (Lewis's *emphasis*, 2004: 100).

So, the point is that Mary does not gain any new propositional knowledge (knowledge about facts – e.g. that the fire truck is red) after moving away from the monochrome room, but only a bundle of abilities referring to the ability to imagine, to remember and to recognize colours or colour experiences. This permits the inference that her learning does not imply the existence of propositional information that is new to her.

The second version of the "no propositional group" is a variant called the acquaintance reply. It also goes against Jackson's knowledge argument and was formulated by Earl Conee (1994). This variant reductive physicalist version is not a popular reply. Let me explain, for Conee "knowledge consists in acquaintance with the experience" (Conee 1994: 136) and is "irreducible to factual knowledge or knowing how" (*ibid.*). Accordingly, "knowing something by acquaintance requires a person to be familiar with the known entity in the most direct way that it is possible for a person to be aware of that thing" (Conee 1994: 144). For this reply, knowledge gained is acquaintance knowledge and is not propositional knowledge or even practical knowledge, because Mary, as presented by Jackson in the thought experiment, learns what it is like to experience colour, by being acquainted with the red colour and that, according to Conee (1994), cannot be adequate to explain epistemic progress.

In sum, these responses (ability and acquaintance replies) to Jackson's knowledge argument are offered as support of reductive physicalism (RP). Though they opine that Mary 'surely' gets some new knowledge, it is non-factual, only practical knowledge when she sees a red fire truck for the first time. As already pointed out earlier for reasons of scope I will not discuss the acquaintance reply any further, going forward I will focus exclusively on the version of the ability reply by Nemirow and Lewis. In my view, the "no propositional group" responses to Jackson's knowledge problem, specifically the ability hypothesis applied as an epistemological reply, can be turned into *support* for Jackson by applying a reading of knowledge-how that is based on the view that claiming that Mary does not really acquire new knowledge but only an ability, actually DOES relate to the concept of subjective experience on Wiredu's view of the concept of mind – which may then be viewed in favour of arguments against reductive physicalism (RP), in support of Jackson and hence, in my view, it is a candidate reply suitable to be strengthened to support Jackson's property dualism. I will come back to this argument in Chapter six.

The last group in my categorisation is what I have called the propositional knowledge group; those in this category reject the inference to physicalism's falsity by arguing that what Mary learns entails an acquisition of new ways to represent facts she knew before leaving the monochrome room. The identity of the group is premised on the nature of knowledge that she now has acquired; that is,

> Mary's new knowledge after release [as something that] constitutes propositional knowledge (genuine information) (Nida-Rumelin 2009: n.p.).

4.3.4. Propositional Knowledge Group

The last category in my new categorisation of responses offers "some indirect methods" (Chalmers 1996: 145) seemingly in support, in a qualified and limited way, of Jackson's attack on reductive physicalism (RP) as it argues against the ability reply. The group is exemplified mainly by Brian Loar (1990), William Lycan (1996)[110], David Chalmers (1996) and Jeff McConnell (1995) with several others as I will point out below. Specifically, positing that the ability reply is not a good (negative) response to Jackson's attack on reductive physicalism (RP).

This is a complex reply; in the literature the view is labelled "the new knowledge/old fact view"[111]. The proponents of this view argue that Mary gains new propositional knowledge, although not in the way that Jackson implies, as they imply that Mary already knew what she 'learns' when she enters a polychromatic world. In general, as rejoinders, they argue against the inferential claim that Mary does not learn anything new of a propositional type upon her

[110] "A Limited Defense of Phenomenal Information" was first published in *Conscious Experience* edited by Thomas Metzinger (1995). Ferdinand Schoningh, Paderborn as a longer version, in this article he gives ten arguments against Nemirow and Lewis. The same article but slightly shortened was also published as chapter five by William G. Lycan (1996) in his book *Consciousness and Experience*, Massachusetts Institute of Technology and has a second printing (1997), in this book chapter he only gives nine arguments against the ability hypothesis. In this thesis, I refer to the both articles and they are cited as Lycan (1995) or Lycan (1996).
[111] According to Torin Alter (1998), *the old-fact/new-guise analysis* is the argument that Mary "only *seems* to gain knowledge: in reality, she merely apprehends old (i.e., previously known) facts in a new way – under new representations or guises" (*author's italics* Alter 1998: 41).

release, the basis for this reply is to say, Mary gains new facts, however, the new knowledge cannot be a threat to non-reductive physicalism, since its new knowledge of an old fact she already knew before her release. In other words, they are up in arms with the Lewisian claim in favour of only knowledge-how, to which they object. For them Mary actually attains new factual knowledge after departing from the monochrome room. Hence, they argue against the ability hypothesis, insisting that Mary now has genuine information. Ned Block (2004) in an article "Qualia: What it is like to have an experience" explains,

> What Mary acquires when she sees red for the first time is a new phenomenal *concept*. This new phenomenal concept is a constituent of genuinely new knowledge – knowledge of what it is like to see red. But the new phenomenal concept picks out *old* properties, properties picked out by physical or functional concepts that she already had in the black and white room. So, the new knowledge is just a new way of knowing old facts. Before leaving the room, she knew what it is like to see red in a third person way; after leaving the room, she acquires a new way of knowing the same fact. If so, what she acquires does not rule out any possible worlds that were not already ruled out by the facts that she already knew, and the thought-experiment poses no danger to physicalism.
> (https://www.nyu.edu/gsas/dept/philo/faculty/block/papers/qualiagregory.pdf)

The propositional knowledge position (indirectly) supports Jackson's anti-physicalist stance; hence it is regarded as offering a positive reply to Jackson's argument, albeit limited as explained below.

In this group, offering qualified and limited support to reductive physicalism I will consider Loar, Lycan, and some others.

Loar (1990) argues that the knowledge Mary gets can be expressed in embedded contexts. Loar points out that "the embedded occurrence of feels like such and such" (Loar 1990: 86) in sentences like "*if* pains feel like such and such then Q" (*author's italics ibid*.) as constituting propositional knowledge, "cannot be accounted for in a model that treats knowing of what it is like as mere know-how" (Nida-Rumelin 2009: n.p.).

Lycan (1996) argues that "Mary's new knowledge goes along with the elimination of epistemic possibilities and that her new abilities are best explained by her having new information". He offers a limited defence of phenomenal information, and argues that the ability hypothesis is unsuccessful […] (Lycan 1995: 243).

In David Chalmers's (1996) view the ability reply is problematic in that it is deeply implausible (*ibid*.: 144). The implausibility arises from the perspective that the issue that is of concern is not that Mary gains some abilities: since it is clear that "when she experiences red, she learns no facts about the world" (*ibid.*). The puzzle seems to be about the extra things, i.e. the non-objective 'stuff' that she learns: e.g. "some *facts* about the nature of experience" (*author's emphasis: ibid.*). In that way the issue revolves around the failure of phenomenal facts to be entailed by physical facts.

McConnell (1995) defends the more radical view that the acquisition of knowing-how is normally accompanied by the acquisition of a particular new item of knowing-that. For him then the ability hypothesis is an example of a response to Jackson that has missed the mark (McConnell 1995: 159).

There are several more "variants" (Nida-Rumelin 2009) of the new knowledge/old fact view that respond to Lewis's ability reply, e.g. Terence Horgan (1984), Michael Tye (1995), David Papineau (1996), and others. As physicalists they have formulated counter-objections to the ability reply; and in that sense they may seem to defend Jackson's property dualism, but their views are that there are still problems for reductive physicalism (RP). Central to their claims as proponents is the view that,

> physical concepts and phenomenal concepts are cognitively independent: it is impossible to see *a priori* that something that falls under a *physical concept* of a particular phenomenal character also falls under the corresponding *phenomenal concept* of that phenomenal character (Nida-Rumelin 2009: n.p.).

For instance, despite Horgan not providing a developed theoretical account of *phenomenal concepts*, he is one of the "first to formulate the basic intuition shared by most or all proponents of the New Knowledge/Old Fact View" (*ibid*.). Horgan (1984) addresses the intuition that suggest how Mary might express the "new" knowledge that this version espouses for her. He explains using a couple of sentences, 1) Seeing ripe tomatoes is like seeing bright sunsets and 2) an indexical expression, seeing ripe tomatoes has *this* property. According to Horgan (1994) sentence 1) would not work because it seems to carry and express the knowledge Mary has already acquired during her stay in the monochrome environment; sentence 2) would seem to be an appropriate indexical term for Mary to express her new knowledge (*ibid.*). He explains:

> Sentence [2] expresses new information because Mary has a perspective on phenomenal redness: viz., the first-person ostensive perspective on that property *as experienced.* Thus, she could not have had this information prior to undergoing the relevant sort of experience herself. But these facts are compatible with physicalism; there is no need to suppose that when she acquires experiential awareness of phenomenal redness, she thereby comes into contact with a property distinct from those already countenanced in her prior physical account of human perception. The new perspective is new, and so is the accompanying capacity to designate the relevant property indexically in a first-person ostensive manner. But the property itself need not be new (*author's italics* Horgan 1984: 151).

Another view that presents physicalism with a difficulty is given by Tye (1995), who proposes a representationalist account of the phenomenal character of experience, about their immediate subjective 'feel'. He argues that "all experiences and feelings represent things and that their phenomenal character – what it is like to undergo them – is itself to be understood in terms of their representational contents" (Tye in Heil 2004: 657). In philosophy of mind, representationalism is the view that "all the characteristic properties of the mental can be explained in terms of representational content" (Klausen 2004: 14); for Brad Thompson (2006) it is the view that "phenomenal character supervenes on intentional content". Tye

(2002) argues that there are two kinds of phenomenal concepts: indexical concepts[112] (an example is the concept applied when thinking of a particular shade of red as "this particular hue" (Tye 2002: 12), while having a red experience) and what he calls "predicative phenomenal concepts" (Tye 1995: 167) that are based on the capacity to make certain discriminations. Tye wishes to accommodate the natural intuition that Mary before release cannot fully understand the nature of phenomenal blueness (she doesn't really know what it is to have a blue experience) (Nida-Rumelin 2009: n.p.). In that way, knowing what it is like is not an ability as presented by Lewis, rather it should be recognised as an "ability to apply an indexical concept to the phenomenal character […] via introspection" (Tye in Ludlow, Nagasawa and Stoljar 2004: 153). On this view there is no denial that Mary learns something but we cannot conclusively say it is something phenomenal, meaning we are not denying that there is something she learns, but learns only by going to her earlier experiences, which goes back to say Jackson's intuition is unaffected, and that "the knowledge argument is not undermined" (Alter 2007: 74).

Arguing from a physicalist point of view also is Papineau (1996), who distinguishes third person and first person acts about experiences as he outlines what he has called the "antipathetic fallacy"[113] (Papineau 1993: 169). First person acts involve the imagination of an experience of the relevant kind. Third person acts are only possible after you have had the experience (*ibid*.). According to Nida-Rumelin (2009), the basic idea that Papineau is expressing may be put like this:

> When Mary is finally released and after some time sufficiently acquainted with colour experiences she can 'reproduce' blue experiences in her imagination. These

[112] "Her conception of it is indexical. She thinks of it only as *that* shade of red. But she certainly knows what it is like to experience that particular hue *at the time at which she is experiencing it."* (Tye 2002).
[113] "Ruskin coined the phrase "pathetic fallacy" for the poetic figure of speech which attributes human feelings to nature ("the deep and gloomy wood", "the shady sadness of a vale"). I am currently discussing a converse fallacy, where we refuse to recognize that conscious feelings inhere in certain parts of nature, namely, the brains of conscious beings" (Papineau 1993: 177).

> imaginations of experiences of a particular kind can be used to refer to experiences of the kind at issue and to think about them. Obviously, Mary could not have first person thoughts about colour experiences (she could not use imagined blue experiences in order to refer and to think about blue experiences) before she ever had blue experiences. After release, Mary can acquire new beliefs: first person beliefs about blue experiences. But for every such new *first-person* belief about a given kind of experience, there will be one of her old *third* person beliefs which refers to the same kind of experience and has the same factual content (Nida-Rumelin 2009: n.p.).

To emphasise and make the point clearer; about the reality that there is no new piece of knowledge that is really acquired that was not known already, I quote Papineau's (2011) analogy,

> Suppose a researcher into educational history knows of all the 117 children in Bristol Primary School in 1910—including Archie Leach. Then she learns, on reading Movie Magazine that Cary Grant was also at the school in 1910. In a sense, she has learned something new. But this doesn't mean that there was an extra child in the school, in addition to the 117 she already knew about. In truth, Cary Grant is one and the same person as Archie Leach. Her new knowledge is only new at the level of concepts. At the level of reference there is nothing new. The objective fact which validates her new knowledge that Cary Grant was at that school is no different from the objective fact that validated her old knowledge that Archie Leach was at the school. (Moreover, if she comes to learn that Cary Grant = Archie Leach, the fact which makes this identity true is similarly none other than the fact she always knew, that Archie Leach = Archie Leach.) (Papineau 2011: 177).

All of the above imply that although it is the case that 'new' information is added after Mary left the monochromatic room, it is just old knowledge in a new guise. This does not necessarily imply that the new knowledge is phenomenal knowledge at all, and thus this group, although agreeing that new knowledge is gained, offer only qualified limited support for Jackson.

In sum, I have given a novel outline of the four categorisations of the replies to Jackson's knowledge argument. They were presented in the following successive manner: the doubts group, the logic group, the no propositional knowledge group and lastly, the propositional knowledge group.

In the next section, I focus on two issues, viz., the counter-objections to the ability hypothesis, i.e. those who argue in defence of the knowledge argument. Recall, the ability hypothesis says that knowing what an experience is like just is the possession of abilities, i.e. mental states: e.g. to remember, to imagine, and to recognize and that having such should be taken as *knowing how* (Lewis 1990: 516). Similarly, Nemirow's perspective is that "knowing what an experience is like is the same as knowing how to imagine having the experience" (1990: 495). And then, I also discuss the counter-objections against the propositional knowledge group: new knowledge/old fact view. I will discuss them as g*roup a,* those counter-objections that support Jackson's anti-physicalist stance more firmly perhaps than the propositional group and are objections to the propositional group, and those in *group b* that are specifically counter-objections to the Nemirow-Lewisian ability reply and thus also in defence of Jackson's attack of reductive physicalism (RP). Replies in *group b* are put across as defending the knowledge argument; arguing that the ability hypothesis is implausible, and that it has 'undesirable consequences' as explicitly suggested by Janet Levin (1986).

4.4. Counter-Objections: Against the Ability Hypothesis, for Jackson; and, Against the New Knowledge/Old Fact (NK/OF) View, Indirectly for Jackson.

In the last section, I outlined a new categorisation of the responses to Jackson's anti-physicalist knowledge argument: the argument that draws the inference that what-it-is-like-to-be is not part of the physical features of the world but something over and above (Burwood *et al.* 1999: 118). In the section, from the initial four questions by Van Gulick (1999); to the seven groups that were outlined by Nida-Rumelin (2009); and, the three responses by Goff (2017); I transformed them into a more focused group with four categorisations.

In this section, I will now further whittle down the categorisations to only focus on the last two groups among the four categories I have outlined. The section is double-pronged, I turn

to the counter-objections directed against the two specific groups of physicalists that espouse diametrically opposed viewpoints: either as offering support to Jackson or those against Jackson by arguing for the ability hypothesis[114]. These as counter-objections in their varieties have both remained unsatisfactory responses to the knowledge argument against reductive physicalism (RP). My starting position is to agree with David Chalmers (2002) who asserts;

> [a]lmost everyone agrees that Mary learns *something* when she leaves the room, but materialists argue that this new knowledge does not threaten materialism (Chalmers 2002: 199).[115]

The two groups I will focus on are as follows:

a. the propositional knowledge group (new knowledge/old fact view-) – indirectly for Jackson – and,
b. the no propositional knowledge group (the ability hypothesis) – against Jackson.

I assess the counter-rejoinders proposed so far according to the way I have grouped them, that is, according to what they espouse; either in *group a*): (e.g. Janet Levin (1986), Brian Loar (1990), and William Lycan 1996), or in *group b*): Brian Loar (1990), Jeff McConnell (1995), William Lycan (1996) and the variants given by Terence Horgan (1984), Michael Tye (1995) and David Papineau (1996)[116].

[114] I would like to point out that although the viewpoints that are argued for are opposed: some philosophers e.g., Loar and Lycan have contributed views for both sides of the coin; that is, they have put across views for and against some aspects of the knowledge argument.
[115] According to Daniel Stoljar (2017), 'materialism' and 'physicalism' are now often interpreted as interchangeable, and it is such usage that I have in mind here. Also see Footnote 15 in Chapter two, section 2.1.2., where I do not accept Lewis's (1994) assertion on his preference to continue using materialism instead of physicalism.
[116] It is difficult to have these two groups as clear cut; the arguments they advance are relevant for both side of the replies, hence some of them (Loar and Lycan) are in both group *a* and group *b*. In general, most philosophers are not fully exclusive in their views. As such my aim here is therefore to guide the reader in understanding the views that these philosophers are arguing for or against.

First, *group b*), are those who argue in defence of Jackson in the sense that they are against Nemirow and Lewis[117]. In assessing counter-responses to them, I highlight the twofold issues that physicalists are engrossed in: 1) the acquisition or 2) non-acquisition of a type of epistemological knowledge: the *knowledge-that and knowledge-how* debate. The examples of physicalists I included above have both concluded that the ability hypothesis is not a good argument.

Second, *group a*), are those whose objections are directed against what is referred to as the *new knowledge/old fact view*: this perspective interrogates the type of knowledge Mary has acquired and they argue in support of Jackson's anti-physicalist stance. My focus in this thesis is not directed at these physicalists in *group a*), who argue that the idea behind the *new knowledge/old fact* objection makes it unsuccessful; rather it is on those reductive physicalists, who argue specifically against the ability hypothesis viz., *group b*): these offer counter-objections to the ability hypothesis, i.e. those who argue in defence of the knowledge argument. In other words, they argue thus indirectly in defence of Jackson's attack of reductive physicalism (RP).

My assessment seeks to reinvigorate the characterisation of the nature of "that *something*" (Chalmers 2002: 199)[118]: that of either a propositional kind or a non-propositional kind as constituting discovery of phenomenal information. For the purpose of my argument, despite several critiques directed at the ability reply which is a reductive physicalist argument, I choose it as my preferred rejoinder: because I think it can potentially be converted to a give a novel positive reply in support of Jackson's property dualism. As I will argue, Lewis's formulation of the ability hypothesis as an epistemological thesis (know-how) holds potential, in my view, to answer as support for Jackson's (1982) non-reductive physicalist view when

[117] Independently formulated replies: I have made this point clear in the earlier section 4.3.3.; initially Nemirow in response to Nagel and Lewis directed at Jackson.
[118] See the full quote from Chalmers (2002: 199) on the previous page, (footnote 110).

amplified and consolidated with the Wiredu-an (1987) quasi-physicalist perspective (see Chapters five and six). I begin with the objections to *group b*), the no propositional knowledge group (against Jackson)

4.4.1. Counter-Objections to the No Propositional Knowledge: Against the Ability Hypothesis

As I have already explained in the last section, and to recap, the ability hypothesis is a negative rebuttal to the knowledge argument, in other words, it is against Jackson's non-reductive physicalism (NRP). The ability hypothesis as a reductive physicalist argument attributed to Nemirow (1980) and Lewis's (1988)[119] formulations, and is forthrightly not an affirmative reply to Jackson's anti-physicalist perspective. It concedes that Mary gains new knowledge in here new environment, but it denies that she adds new propositional facts. Mary, according to the reductive physicalists, does not acquire any new propositional knowledge outside the monochrome room; now in her new polychromatic environment, she has acquired knowledge-how to imagine, recognize and remember, she previously was missing these are abilities (mental states).

In Lewis's view, for example, while it is true that Mary learnt something, it is false that there is some new truth about the world – all she has are those mental states of imagining, identifying and recollecting experiences (Stoljar and Nagasawa 2004: 17). For example, I can spend the whole day with Kirsty Coventry[120] in her office, learning lots of facts about doing the backstroke, but that is not the same as spending time in the pool with her as she instructs how to do a backstroke, spending time in the pool is learning how to do a backstroke, it is to

[119] David Lewis' "What Experience Teaches "was first published in 1988, in *Proceedings of the Russellian Society* 13: 29-57. In this section I have used reprinted versions (1990, 2004).
[120] Kirsty Coventry was appointed Minister of Youth, Sport, Arts and Recreation in Zimbabwe in 2018. She is the only African to break the 1-minute barrier in the women's 100 metres backstroke. She holds the highest number of individual Olympic medals of all female swimmers in history. *The Conversation*. October 17, 2018.

gain the ability to do it and not just to imagine, identify, and recollect experience. According to Burwood *et al*.;

> [i]t is these knowings-how, these abilities, that constitute knowing what it is like to have a certain experience. What it is like is something that can be known, but no *fact* over and above the physical is hereby known (*author's italics* Burwood *et al*. 1999: 119).

Going forward, although the ability reply is attributed to both Nemirow (1980, 1990) and Lewis (1983, 1988), in specific instances in this section, I refer to Lewis's formulation exclusively and, in such instances, I will indicate such usage accordingly; otherwise, when I refer to the ability hypothesis I refer to Nemirow and Lewis's formulation together. (In Chapter six, my reasons for choosing to amplify the ability hypothesis – epistemologically and metaphysically – as my preferable rejoinder to Jackson (1982, 1986) will be made clearer.)

The first prong of this section is focused on these proponents who model their defence of the knowledge argument against the ability hypothesis based on a perspective that believes that Mary without a doubt learns *something propositional*. Thus, it is their argument that the knowledge argument gives reductive physicalism (RP) a strong challenge; for them, the ability reply fails in addressing the concerns raised by Jackson's anti-physicalist knowledge experiment. For instance, they speculate about what happens if Mary is asked a question about what she learned when she saw the red fire truck for the first time. She could say I learned what it is like[121] to see a red fire engine. This example is evaluated in more detail in Loar's (1990) counter-objection below.

There are several possible objections to the no propositional knowledge group: recall, this group is among my new categorisation of the responses to Jackson's knowledge argument

[121] Recall that in Lewis's (1990) view, what it is like refers to abilities, i.e. to remember, imagine, and recognize, as experienced *aposteriori*. His position is that experience is the best teacher about what a new experience is like.

against reductive physicalism (RP) which I discussed in the last section. There are many objections to its claims and mostly directed towards discrediting it by generally arguing that the ability hypothesis does not adequately address Jackson. To discuss the replies, I now turn to Tye (2004)[122] whose address is directed against the objections given to Lewis's (1983, 1990) ability hypothesis and he has labelled them "unpersuasive" replies (Tye 2004:146). Tye (2004) is an example among others who has outlined a defence of the ability hypothesis against Jackson who he addresses as a "qualia freak"[123]. His defence of the ability hypothesis is expressed below. His strategy is to show how those proponents who have tried to support Jackson via attacking the ability hypothesis have not really done a good job.

In this case Tye's arguments are outlined against what he has labelled "the three Ls" (*ibid*.): Janet Levin (1986), Brian Loar (1990) and William G. Lycan (1996), who argue in defence of Jackson's knowledge argument, in a limited way – but unsuccessfully. There are a number of proponents[124] of such unpersuasive arguments; however, for this thesis, I will only concentrate on "the three Ls" targeted by Tye as I indicated above. Tye attaches the unpersuasive label to those replies that seem to represent clever attempts, in my view, by some philosophers to give arguments that show that the ability reply is not such a good argument to dislodge Jackson's "successful"[125] knowledge argument. Bluntly expressed these counter-arguments against the ability hypothesis fail.

The three L's argue against what I have called hard-core physicalists: Nemirow and Lewis, who defend reductive physicalism (RP) by presenting the ability hypothesis against Jackson-

[122] Tye's article; "Knowing what it is like: The ability hypothesis and the knowledge argument" has been published in several anthologies, 2000, 2002, 2004 and so on. I refer to the same article when I reference the different dates and it is for reference purposes only.
[123] Recall it was Jackson (1982) who labelled himself a "qualia freak".
[124] Proponents is used here to refer to those philosophers whose perspective advocates the view that Mary without a doubt learns *something* of a propositional type.
[125] As I indicated in chapter two, for this thesis, I maintain Jackson's original view (1982, 1986) without worrying about his change of mind in 1998 (see e.g., Van Gulick in Ludlow, Nagasawa and Stoljar 2004: 366).

a property dualist. Tye has pointed out that some of the rejoinders, e.g. Lycan (1996), are mere endorsements for Levin (1986), hence I spend more time on Levin, and then point to a few of Lycan's own arguments. Similarly, Loar's (1990) objections are also echoed by Lycan (1996). The three L's as examples of indirect defenders of the knowledge argument have each been labelled by Tye (2004: 146-150) as follows;

1) Levin's objections are "uncompelling",
2) Loar's responses that use terms in the language of thought are "inappropriate" and
3) Lycan's conclusions are "non-sequitur".

Tye does not directly refute the arguments by "the three Ls", rather he disguises his disapproval but saying their arguments missed the point. Allow me to start by outlining Levin's objections: which are a defence of the knowledge argument, i.e. she seeks to reinforce it. In her paper "Could Love be like a Heatwave? Physicalism and the Subjective Character of Experience" Levin's (1986) defence aims at both Nagel (1970) and Jackson (1982, 1986) noting that the two offer arguments that,

> […] are intuitively compelling grounds for the view that without the capacity for a certain sort of experience, one cannot have knowledge of certain simple and straightforward facts about experiences of that kind (Levin 1986: 246).

Levin (1986) highlights that objections to Jackson, and similarly to Nagel's argument, depend on equivocation (Levin 1986: 245). To briefly explain Levin's point; she claims that premises credited to Nagel and Jackson respectively: 1) "knowledge of what it is like to be a bat" or 2) "knowledge of what it is like to see colours", to be plausible, ought to be understood as relating a kind of *practical* knowledge or ability[126] (*ibid.*). A response in Jackson (1986: 293-

[126] Nemirow (1980) in a book review of *Mortal Questions* (1980) makes this point. The *practical* knowledge or ability is what in Nagel's well-known thought experiment "What is it like to be a bat?"; is put across as "the ability to imaginatively project oneself into another's subjective point of view; in Jackson's "Epiphenomenal Qualia" is an ability that is not so clearly defined" (Levin 1986: 245).

294) "What Mary didn't know" directed to Paul M. Churchland's (1985)[127] objection[128] is interesting to consider here since it also applies to Levin's concerns. Jackson's (1986) reply begins by giving clarifications since he believes Churchland (1985) has not accurately represented his position "[…], It's not the *kind of knowledge* Mary has but *what she knows* that matters"[129]. He therefore provides "a convenient and accurate way" (Jackson 1986: 293) of displaying his knowledge argument, not the way Churchland displayed it. Jackson (1986) reminds of the whole thrust of his original argument;

> Mary does not know everything about brain-states and their properties because she does not know about the qualia, the experiences of colour, associated with them. She knows everything physical about them from her achromatic perspective, but learns something new in addition to what is known physically when she experiences colour for the first time (Maslin 2001: 153).

For Jackson (1986), "the knowledge argument does not rest on the dubious claim that logically you cannot imagine what sensing red is like unless you have sensed red" (Jackson 1986: 292). For clarity Jackson says,

> 1) Powers of imagination are not to the point. The contention about Mary is not that, despite her fantastic grasp of neurophysiology and everything else physical, she *could not imagine* what it is like to sense red; it is that, as a matter of fact, *she would not know*. […];
> 2) […] the intensionality of knowledge is not to the point. The argument does not rest on assuming falsely that, if *S* knows that *a* is *F* and if *a* = *b*, then *S* knows that *b* is *F*. It is concerned with the nature of Mary's total body of knowledge before she is released: is it complete, or do some facts escape it? […]; and
> 3) […] the knowledge Mary lacked which is of particular point for the knowledge argument against physicalism is *knowledge about the experiences of others*, not about her own. […]. (*author's emphasis: ibid.*).

[127] "Reduction, Qualia, and the Direct Introspection of Brain States" *The Journal of Philosophy LXXXII* (1985).
[128] Paul Churchland has offered what he calls "a conveniently tightened version" (Churchland 1985: 23) of the knowledge argument as an objection. He says 1) Mary knows everything there is to know about brain states and their properties. 2) It is not the case that Mary knows everything there is to know about sensations and their properties. 3) Therefore, applying Leibniz's Law, sensations and their properties are not identical with brain-states and their properties (*ibid.*). Jackson (1986) accuses Churchland of not accurately presenting his argument (1986: 293).
[129] Jackson's words from an interview, Interviewing Frank Jackson by James Garvey 2015.

Jackson (1986) says the important point is "not the kind, manner, or type of knowledge Mary has, but *what* she knows beforehand is *ex hypothesis* everything physical there is to know, but is it everything there is to know? That is the crucial question" (Jackson 1986: 293-294).

I return to Levin's (1986) efforts in support of Jackson. She points out how Jackson (1982) argues against Nagel, regarding the lack of such an ability, from a third-person objective perspective to tell us what it is like to experience something. She states, Jackson's view is not "[…] the same as a gap in one's *theoretical* knowledge, or knowledge of the facts" (Levin 1986: 245). Since,

> […] there does not seem to be any important tie between these two sorts of knowledge, as it is hard to see why even the most comprehensive description of mental states should be expected to provide one with the practical abilities in question (*ibid.*)[130].

Levin (1986) gives three objections that suggest that "the ability hypothesis has a number of undesirable consequences" (Tye 2004: 146). First,

> It would be perverse to claim that bare experience can provide us *only* with practical abilities, and never with theoretical knowledge. By being shown an unfamiliar colour, I acquire information about its similarities and compatibilities with other colours, and its effects on other of our mental states: surely, I seem to be acquiring certain facts about that colour and the visual experience of it (Levin 1986: 246).

Tye (2004) believes Levin (1986) seems to miss the point here. According to Tye the objection asks the wrong question; since the issue that there is something that is gained has not really been contested, "it is certainly true that [one] can gain information about a colour [one] have never seen before by experiencing it" (Tye 2004:146). The question should rather be whether Mary could in a comparable situation gain information about colour (*ibid*.). Recall, Mary is presented as that omniscient scientist who is familiar with the full spectrum of colours; the only thing amiss is that she does not know what it is like (subjective) to have

[130] See Jackson (1982: 132). Jackson's responses directed to Nagel.

the experience of colour. Tye's (2004) suggests that Lewis has already addressed this aspect of Levin's objection. Lewis states,

> Maybe Mary knows enough to triangulate each colour experience exactly in a network of resemblances, or in many networks of resemblance in different respects, while never knowing what any node of any network is like (Lewis 1990: 502).

So, Tye might have a point that Levin's objection is unpersuasive since it fails to offer anything new that might undercut the ability hypothesis (Tye 2002: 6) or strengthen the knowledge argument, in his view.

The second objection is steeped in empiricism, i.e. empiricism viewed as a theory of concept acquisition. Levin believes,

> […] it is not implausible to suppose that experience is the *only* source of at least some of these facts…[H]ow *does* one convey the taste of pineapple to someone who has not yet tried it, and does that first taste not dramatically increase, if not fully constitute, the knowledge of what the taste of pineapple is? (*author's italics* Levin 1986: 246).

According to Lycan,

> Is not *some* empirical knowledge, even the smallest occasional bit, based on beliefs about the phenomenal character of one's experience? If so, then there are such beliefs; and, plausibly, Mary could not have had phenomenal-colour beliefs before her release, because as the empiricists argued, one must have phenomenal experience in order to have phenomenal concepts, and one must have phenomenal concepts in order to have phenomenal beliefs (Lycan 1995: 247).

In Lewis (1990: 519) view, the expression "what experience *E* is like" denotes experience *E* (Tye 2004: 146). So, Lewis can happily grant that knowledge of what the taste of pineapple is like is knowledge of the taste of pineapple, of what that taste is (Tye 2002: 7). The pertinent issue being raised in this objection is about the *kind of* knowledge that one acquires when tasting a fruit for the first time. According to the ability hypothesis, the kind of knowledge acquired is knowledge-how, since one will from that moment of initial tasting, experience *E*, onwards they have the ability to remember and imagine how that pineapple tastes, *E*. I again

think Tye (2004) makes a point when he says Levin's objection is *uncompelling*. Levin (1986) does not provide a way to counter the suggestion that the kind of knowledge acquired is *knowledge-how*, as proposed by Lewis, so the ability hypothesis is plausible and she does not give any information to the contrary, regarding the kind of knowledge acquired.

For her final objection, she insists that,

> […] there seem[s] to be [an] important cognitive difference between ourselves and those incapable of sharing our experiences. It would seem extremely natural to explain this by appeal to differences in our knowledge of the facts about experience: indeed, what other explanation could there be? (Levin 1986:246)

Tye's response is to point out that those who argue for the ability hypothesis, against the knowledge argument believe that, "the difference can be explained by differences in cognitive abilities" *E* (Tye 2002: 7). In that case, for one who have never had the opportunity to have experienced a particular *experience E*, you lack those aspects that anchor the ability hypothesis; remembering *E*, recognizing *E* when it occurs again, and imagining it (*author's ibid.*).

Loar (1990), according to Tye (2004), also offers inappropriate arguments in defence of the knowledge argument against the ability hypothesis. Loar outlines two objections that he says are not to be taken as "a quibble about *having information*" (*my emphasis* Loar 1990: 86). The idea is succinctly put across as follows, "since we can embed what Mary learns in the antecedent of a conditional, it cannot be that she learns mere know-how" (Stoljar and Nagasawa 2004: 18). As pointed out already the first objection by Loar (1990) is echoed by Lycan (1996). Loar puts it as follows,

> One can have knowledge not only of the form "pains feel like such and such" but also of the form "*if* pains feels like such and such then Q". Perhaps you could get away with saying that the former expresses (not a genuine judgement but) the mere possession of recognitional know-how. There seems however no comparable way of accounting for

> the embedded occurrence of 'feels like such and such' in the latter; it seems to introduce a predicate with a distinct content (Loar 1990: 86).

In response, Tye (2004) points out that this objection addresses the substance of the ability hypothesis, recall the locution, Nemirow and Lewis focuses on 1) 'knows what it is like' and not the locution 2) 'feels like such and such' (Tye 2004: 149). Tye believes that this objection fails to threaten the ability reply and which would suggest that Jackson (1982, 1986) is therefore defended. I will however revisit this in Chapter five, to test if Loar's objection can still successfully stand against my position, when added to the ability reply, and in defence of Jackson.

The second objection for Loar (1990) states:

> For many conceptions of phenomenal qualities, there simply is no candidate for an independently mastered term, instances of which one then proceeds to learn how to recognize: my conception of a peculiar way my left knee feels when I run (a conception that occurs predicatively in various judgements) is not my knowing how to apply an independently understood predicate (*ibid.*).

Again, Tye in support of the knowledge argument argues against Loar's suggestion that implies that abilities correlate with linguistic usage. For instance, I know how my right arm feels if I try spin bowling; as such advocates for the ability hypothesis would say, I have particular abilities, i.e. "[t]hese abilities (to recognize, to imagine) require conceptions. But the conceptions need not be ones that their subjects can articulate publicly in language" (Tye 2002: 8). Thus, Loar's argument might be construed as inappropriate if considered in terms of the language of thought[131]. In defence of Loar (1990), a question might be posed that seeks to understand why abilities cannot be expressed when they are exercised by a subject? I agree

[131] The language of thought hypothesis (LOTH) was articulated by Jerry Fodor (1975) in his book titled*: The language of thought*, a book whose main argument "[...] presupposes the anti-reductionist thesis that mental states are not behavioural dispositions nor is psychology reducible to brain science" (Marks 1978: 109). LOTH, is defined as an empirical thesis about the nature of thought and thinking, and is express thus; "thought and thinking are done in a mental language, i.e., in a symbolic system physically realized in the brain of the relevant organisms" (Aydede 2015: n.p.). In other words, it is a concept that describes mental activity occurring in the brain as a form of language; the concept argues that mind applies semantic and syntactic rules in mental representations.

with Tye when he notes that besides just stating the three aspects that Lewis gives as that which make up the *what it is like*, viz., to remember, imagine, and recognize (as mental states), a satisfactory general account of knowing what it is like as subjective experience has not been presented by those who are contesting the ability reply.

Lycan (1995) assesses and endorses the arguments against the ability hypothesis that Levin (1986) and Loar (1990) outline, with a few other objections of his own that "seem […] very persuasive" (Tye 2004: 147). According to Lycan, Nemirow (1980, 1990) and Lewis (1983, 1988) offer an important defence of reductive physicalism (RP) against Jackson, however in his view the ability hypothesis is unsuccessful. In his view though it is not successful, "it can be reconstructed to advantage" (Lycan 1995: 243). Lycan offers a limited defence of phenomenal information, I will not restate the nine arguments[132] he outlines since they are already included in Levine and Loar, except to give one example of his own objections: what he sets out as an argument "from comparisons" (Lycan 1995: 248). All the arguments Lycan (1996: 92-5) gives are meant to show "that what Mary gains is indeed [some] propositional knowledge (*ibid*.). Like Levin (1986) and Loar (1990), Lycan argues that the strategy of the ability argument as given by Lewis is unsuccessful, especially the attack on phenomenal information[133] (Lycan 1996: 91), given the focus

> […] that Mary's new knowledge goes along with the elimination of epistemic possibilities and that her new abilities are best explained by her having new information (Lycan 1996: 92).

[132] Lycan, W. G. (1995). "Limited defence of phenomenal information" in Thomas Metzinger (ed.) *Conscious Experience*. 243-258. In the article, he sets out the nine arguments for the claim that what is gained is indeed propositional knowledge and not just a set of abilities; he label the arguments; 1. From meaning and syntax, 2. From possibility-elimination, 3. From theoretical knowledge, 4. From the empiricist residue (Levin 1986: 479), 5. From 'important cognitive difference' (Levin 1986: 479-80), 6. From best explanation of the abilities, 7. From attempting-to-describe, 8. From comparisons, 9. From success and failure (Lycan 1995: 244-249). These are all argument against Nemirow and Lewis's ability hypothesis.

[133] In other words, the propositional form of phenomenal knowledge in the sense of a subjective 'knowledge that' and not just a set of abilities (Lycan 1995: 244).

Lycan (1996) considers an example that compares phenomenal qualities. He argues from comparative descriptions of phenomenal qualities, he considers as examples hydrogen sulphide smells and rotten eggs[134]. Recall that "… phenomenal qualities can be understood, roughly and intuitively, as the qualities associated with a conscious state that constitute 'what it's like' to be in that state" (Cutter 2016: n.p.), e.g. what it is like to experience something (e.g. CS_2)[135] and what it is like to experience another (e.g. rotten eggs) (Lycan 1995: 248). Generally, in philosophy of mind "the idea is that physicalism's general picture is too impoverished to have a place for phenomenal qualities" (Braddon-Mitchell and Jackson 1996: 123); qualities that have raised many questions that have endured, e.g. the mind-body debate in philosophy of mind. Returning to the comparative example that Lycan (1995) gives above, the two phenomenal qualities are subjects of an olfactory exercise and it turn out that comparisons can made about them. In his own words, Lycan (1995) makes the point as follows,

> What it is like for S to smell CS_2 during a time interval *t* is exactly what it is like for S to smell rotten eggs during *t*. But that formulation seems to treat 'what it's like' as a matter of fact, even if an ineffable fact; and the facts in question are *per se* not about imagining, but about actually smelling. And what is factual is propositional (Lycan 1995: 248).

Taking an example from Lewis (1988), he accepts that comparison can be made regarding what it is like to taste vegemite and what marmite is like, "I have been told: the taste of Vegemite somewhat resembles that of Marmite" (Lewis 1988 in Ludlow, Nagasawa and Stoljar 2004: 79-80). His assertion is that what experience *E* is like is the same as *E*. For Lewis what it is like (subjective experience) is a matter of fact. So, the issue here concerns what kind of knowledge is what it is like. Does Mary learn know-that and not just a set of

[134] For the example of rotten eggs Lycan says "I almost used a different example, the taste of Vegemite, for I have a Vegemite comparison that is vivid and accurate, but if I had expounded it and David Lewis were to read this paper, he would lose his vaunted innocence and it would be my fault (Lycan 1995: 248).
[135] Carbon disulfide is a colourless volatile liquid with the formula CS_2. The compound is used frequently as a building block in organic chemistry as well as an industrial and chemical non-polar solvent. It has an "ether-like" odour, but commercial samples are typically contaminated with foul-smelling impurities. (Wikipedia).

abilities? Of concern is that Lewis like other hardcore physicalists "deny that to know what it is like to be in a particular sensory state is a propositional matter, a knowing that" (Lycan 1995: 244). Rather for the reductive physicalist knowing what it is like is only knowing-how, an ability. In that case the argument by Lycan does not follow.

Having gone through the responses by Levine, Loar and Lycan and the accompanying responses given by Tye, I think it is only right to conclude that Lewis's ability reply does not furnish us "a satisfactory general account of knowing what it is like" (Tye 2004: 152). As such the knowledge argument still haunts reductive physicalism (RP). With such unsatisfactory attempts, Tye (2004) has also contributed an assessment that attempts to shore up the knowledge argument; by himself also bringing under scrutiny aspects that he thinks persists as problematic with the ability hypothesis. He proposes "an alternative hybrid account of knowing what it is like that ties it conceptually both to knowing-that and to knowing-how" (Tye 2004: 144-145).

The hybrid proposal is unique; especially in that the assessment goes further than the counter-replies offered by Levin, Loar and Lycan, as it offers a possible revisiting of the undesirable consequences of the ability hypothesis. Especially problematic, in Tye's view, is that the case of Mary poses an unresolved problem for reductive physicalism (RP). In my view, such an approach seeks to take the ability hypothesis beyond the factive verbs, e.g. to remember, recognize, and reimagine. These verbs are abilities that constitute what it is like on Lewis' view, however Tye believes Mary might not have these on her initial encounter with something red while knowing what it is like is present. Tye's proposal is a valiant effort, yet it falls short as I briefly explain.

Nida-Rumelin (2009) puts Tye's revised ability hypothesis as follows, "knowing what it is like to have an experience of red is the ability to apply an indexical concept to an experience

of red (while having it) via introspection". Tye believes this cannot help the ability reply; he therefore postulates a distracted Mary (Tye 2004: 153):

> The fact that she is distracted does not entail that she doesn't undergo any colour experience any more than the fact that I am sometimes distracted by philosophical thoughts when I drive entails that I no longer see the road and the cars ahead. I am able at such times to attend to my visual sensations even though I do not do so. But the visual sensations are there alright […] [s]he is not cognitively blocked from her visual experiences by a psychological impairment. She *can* introspect those experiences even if, in fact, she does not do so (*ibid.*).

So, though Mary may be distracted during that particular period of time; Mary, like in Tye's driving example above, the points apply *mutatis mutandis* to her state. She is not cognitively blocked, she retains her consciousness at the phenomenal level. There must be something it is like for her to see red. She must have phenomenal qualities. In that case she can become aware by introspection, of what it is like to have experienced red, had she paid attention then. The point that I think Tye is making is that Mary without doubt has the *ability* to mentally point to her [earlier] experience with an indexical concept[136] via introspection. In that case, *what it is like to* indulge the red item is absent, but the proposed ability is present. In that way Mary has added new factual knowledge.

Let's explore it a little further, such a view can be taken to constitute a particular moment of "genuine propositional discovery, [and] to advocates of the knowledge argument, [that] spells trouble for physicalism" (Tye 2004: 155). Physicalism makes the claim that there is no phenomenal knowledge, only physical phenomenon. The indexicality that Tye appeals to does not really help his argument however. He states,

> Nothing that I have said undercuts the claim that knowing what it is like to experience red, for example, is a cluster of abilities of the sort Lewis proposes (2004: 154).

[136] By indexical concept Tye (2004), maybe "[…] knowing what it is like; should be identified not with the cluster of abilities Lewis cites -- for they may all be lacking while knowing what it is like is present -- but rather with the more basic ability to apply […] the phenomenal character of […] experience via introspection" (Tye 2004: 153).

The indexical knowledge of the kind he explicates is "sufficient but not necessary for knowing what it is like to have a red experience" (Nida-Rumelin 2009: n.p.). In my view, therefore, Tye's attempts to defend the reductive physicalist (Nemirow and Lewis), by seeking to show that the three L's fail to argue satisfactorily in showing where the ability hypothesis lacks, in their indirect limited support of Jackson's knowledge argument, actually ends up as a defence of property dualism. However, the question persists, is Jackson okay based on what Tye (2004) said. I think Tye makes interesting assessments on the three L's but his "unique hybrid proposal", though it adds beyond what the three L's put forward, it also fails to dislodge the knowledge argument. I will in Chapter six come back to address these issues in greater detail again.

In this section, I have outlined three counter-objections to the ability reply with critiques from Tye. Tye (2004) shows that the three L's, so as his "hybrid proposal" fail to show the problems on Lewis's version of the ability reply, in their limited support of Jackson (1982, 1986).

4.4.2. Counter-Objections Against the Propositional Knowledge Group: New Knowledge/Old Fact (NK/OF) View, Indirectly for Jackson.

For the second prong of this section on the counter-objections, I begin by a brief recapitulation of the new knowledge/old fact view[137] whose proponents as noted earlier include Loar (1990), Lycan (1995), and McConnell (1994) and several others who have outlined variants of the view, notably, Horgan (1984), and so on. The new knowledge/old fact view and its variants is an (indirectly or qualified positive) reply supporting the knowledge argument, given by physicalists in defence of reductive physicalism (RP) against the ability hypothesis. This objection is about the type of knowledge Mary gets: distinguishing genuine

[137] Others call it 'old-fact/new-guise reply' and the 'two-ways reply' (Cath 2009: 154); old facts/new modes view (Stoljar and Nagasawa 2004), I do not choose a specific term to use but will indicate special usage.

new facts or old facts disguised as new. As postulated earlier, RP does not argue against the view that Mary gets new factual knowledge. And, as such the propositional group argue for the view that the new knowledge referred to is actually old knowledge that is repackaged, in other words, she does not learn anything *new* of a propositional kind, although what she has is propositional knowledge.

To counter the new knowledge/old fact view; Horgan (1984), Loar (1990) McConnell (1994), Chalmers (1996), and others offers an attempt. But in my view, they have developed "unsuccessful" versions of this counter reply. Note some of these are also part of those who are critical of the claim of the ability hypothesis as pointed out in the first prong of this section. Some of them have also contributed favourably to the new knowledge/old fact view. The main concern, that makes the reply unsuccessful, is plausibility. Is it plausible to claim that what Mary learns (outside the room) is an old fact under the guise of a different fact? To explicate the idea behind this counter objection against the new knowledge/old fact view; I want to consider here, how standard cases apply.

Standard cases refer to how philosophers of language use referential language; how "two modes of presentation do involve the introduction of two different reference-fixing properties" (Nida-Rumelin 2009: n.p.). Nida-Rumelin (2009) explains,

> if a subject does not know a given fact in one way that it does know in some other way, this can be explained by two modes of presentation: the subject knows the fact under one mode of presentation and does not know it under some other mode of presentation (Nida-Rumelin 2009: n.p.).

Tim Crane[138] argues "two modes of presentation of something does not imply two things presented." Crane (forthcoming) expresses it as follows;

[138] Crane, Tim (forthcoming). The Knowledge Argument is an Argument about Knowledge. In Sam Coleman (ed.). *The Knowledge Argument*. Cambridge: PhilArchive copy v1: https://philarchive.org/archive/CRATKAv.

> The 'old fact in a new way' talk is a convoluted formulation of a much simpler idea: that Mary learns something new and this does not imply that the entities about which she gains this knowledge are distinct from the entities she knew all about in the black and white room.

To exemplify, in terms of a comparison, we can apply an example of identification. Let's derive inspiration from a common standard case: e.g. the idea of 'Phosphorus' and 'Hesperus'[139], i.e. *the morning star* or *the evening star* respectively as representing the same cosmic entity, yet the two concepts might be taken as referring to two astronomical entities. One can know Hesperus and Phosphorus without knowing the facts corresponding to it, morning star and evening star represents the same property observed at different times. The example has roots in the ancients Greeks' observations of the sky and noting what they thought to be two distinct bright stars, however we now know that the object denoted was Venus, in one instance observed in the morning and in the other instance observed in the early evening.

Let us turn for a moment to Frege's attempt (philosophy of language) to give a solution to this issue about *reference*. Frege highlights the importance of reference and its importance to meaning but he further suggested another dimension to meaning, namely what he called *sense* (Zalta 2016: n.p.); that is, "the sense of an expression accounts for its cognitive significance – it is the way by which one conceives of the denotation of the term" (*ibid*.). The descriptions of the stars denote the same planet yet the way the descriptions are phrased, points to a uniquely different way of conceiving it, i.e., as if it expresses different senses (*ibid*.). These two entities give the sense of different items even though they predicate the same property in a cosmos. The core issue here is that a mode of presentation that is given "involves two different properties that are used to fix the [same] referent" (Nida-Rumelin 2009: n.p.). In that case,

[139] For a detailed discussion see Leonard Linsky (1959) "Hesperus and Phosphorus". *The Philosophical Review*. Vol. 68, No. 4, pp. 515-518. https://www.jstor.org/stable/2182495. Accessed 6 May 2019.

> In one mode of presentation Venus is given as the heavenly body visible late in the morning (or some similar property), whereas in the other mode of presentation the object is given as the heavenly body visible early in the evening (*ibid*.).

If then the new knowledge/old fact view as an objection uses the explanation suggested where the new knowledge/old fact view involves two modes of presentation, then the argument cannot be applied as a defence of physicalism (*ibid.*). The reason is that the suggested explanation of the "supposed double epistemic access to facts concerning phenomenal types will result in the reintroduction of non-physical properties at a higher level" (*ibid.)*. To explain, the two modes of presentation of a fact – either the physical type or as a phenomenal type – is the challenge, since it would mean that the subject would have to be described as referring to something of a phenomenal type but then described under a non-physical property (*ibid.*).

Jeff McConnell (1994) and others provide examples of this kind of argument. They argue against the claim that,

> the different modes of presentation […] in the case of beliefs about phenomenal states do involve the introduction of different reference-fixing properties. (Nida-Rumelin 2009: n.p.).

They argue that to make the claim is unsuccessful, since as postulated earlier, for the new knowledge/old fact view there is no disagreement that Mary gets new factual knowledge: Mary gains "knowledge about phenomenal characters under phenomenal concepts" (*ibid.*). The contention on this argument that they make is about the view that the new factual knowledge referred to is actually old knowledge in disguise, which would suggest Mary does not learn anything *new* propositional, although what she has is propositional knowledge.

McConnell (1994) in his article, "In defense of the Knowledge argument" points out that it was Horgan (1984)[140] who first identified and developed the argument, and that he merely builds on Horgan's presentation of the argument (McConnell 1994: 171). According to Horgan (1984), Mary learns new concepts but that does not explain it to mean new knowledge of something. Whether we say she learns new facts here depends on how we individuate facts. If we individuate them in terms of properties instantiated in them, then she learns no new facts, for the same property can be brought under different concepts, for example "water" and "H_2O" (Burwood *et al.* 1999: 119-120). For Burwood *et al.* (1999), it does not follow that she learns new properties.

McConnell calls Horgan's argument "a burden-of-proof argument" [141] (McConnell 1994: 172). Horgan's claim is that attacking physicalism on the basis of equivocation based on applying two different senses of the phrase 'physical information' is fallacious (Horgan 1984: 147). Mary while in the monochrome environment,

> does have a complete stock of *explicitly* physical information about human visual processes, it is illegitimate [in Horgan's view] to infer from this that she a complete stock of *ontologically* physical information (*ibid*.).

The physical information is new not because "the *quale* she experiences is a non-physical property, but because she is now acquainted with this property from the experiential perspective (*ibid*.). McConnell summarises Horgan's argument as outlining the following:

> [A] dualism of information does not guarantee a dualism of properties, since distinct items of information can be about the same property. Thus, […], we have no reason to conclude that physicalism is false because of an excess of properties (McConnell 1994: 171).

[140] The paper is titled "Jackson on physical information and qualia" (1984) where he illustrates his point by considering two statements: "Superman can fly" and "Clark Kent can fly".
[141] McConnell (1994) says, "Its point is not to refute Jackson but to shift the burden of proof back to Jackson, requiring Jackson to provide evidence that Mary's new knowledge can't be accounted for in Horgan's way.

Nida-Rumelin (2009) however warns that a counter-example that uses this model (using standard cases) faces a challenge from Loar's (1990) proposal.[142] This is a proposal[143] which states "phenomenal concepts are *recognitional/imaginative* concepts" (Loar 1990: 87). From his locus classicus he states,

> A recognitional concept may involve the ability to class together, to discriminate, things that have a given objective property. Say that if a recognitional concept is related thus to a property, the property *triggers* applications of the concept. Then the property that triggers the concept is the semantic value or reference of the concept; the concept directly refers to the property, unmediated by a higher order reference-fixer (*ibid*.).

Ned Block (1994) provides a summary of Loar's argument as follows, "the concept of a phenomenal property is a recognitional disposition that is 'triggered' by its referent" (Block 1994: 328). This suggests that a single property can be understood to be a referent of distinct concepts. The phenomenal concept refers by triggering that which has a physical property. Similarly, Nida-Rumelin (2009) expresses it thus:

> To have the phenomenal concept of blueness is to be able to recognize experiences of blueness while having them. The recognitional concept of blueness refers *directly* to its referent (the physical property of blueness) where this means (in Loar's terminology): there is no other property (no property of that property) involved in the reference fixing (Nida-Rumelin 2009: n.p.).

Very briefly, the point is that physicalism despite the best efforts is not answered.

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[142] For a detailed discussion on recognitional concepts and triggering see Loar (1990: 87-90) "Phenomenal states". "Triggering. We do not require a philosophical explication of what it is for a property to be the one that triggers a given recognitional concept. Think of some psychophysiology experiment, in which the experimenter tries to determine which internal property her subject discriminates when saying "again" ... "yet again." There seems no special philosophical problem in the idea that there is a best possible answer to the experimenter's question, however difficult it may be to come up with." (Loar 1990: 89).

[143] According to David Chalmers (1996), Loar (1990) goes beyond the water H_2O analogies (standard cases). For Loar even though "heat" and some statistical-mechanical predicates designates the same property (secondary intension), they nevertheless introduce distinct properties (primary intension) (Chalmers 1996: 142). So, he argues that "two predicates can introduce the same property – that is, share the same primary intension – even when this sameness is not knowable a priori. If so, then Mary's knowledge of phenomenal properties may just be knowledge of physical/functional properties, even though she could not have connected the two beforehand" (*ibid*.).

4.5. Conclusion

In this Chapter, I had two sections; viz., the replies directed at Jackson's knowledge argument and the corollary counter-replies. I first surveyed a limited number of replies to the knowledge argument, as categorised by Van Gulick's (1999); Nida-Rumelin's (2009); and Goff's (2017). I then systematically revamped their categorisations into my new categorisation; viz., 1) the doubts response; 2) the logic response; 3) the no propositional knowledge response, and 4) the propositional knowledge response. The new categorisation attempted to distinguish clearly between replies in support of Jackson's attack on reductive physicalism (RP) and replies in defence of reductive physicalism (RP) against Jackson. I then focused onto the no propositional knowledge response, specifically, to the ability hypothesis, particularly on Lewis' (1988) version and in limited instances; I refer to Nemirow's (1990) formulation. These two versions will be emphasised in Chapter six.

In the second section, I have looked at counter-objections to responses to the knowledge argument. I outlined two groups; group *a* and group *b*. First, *group b*), are those who argue in defence of reductive physicalism (RP) against Jackson. Second, *group a*), are those whose objections are directed as support for Jackson. These counter-objections have remained unsatisfactory responses either way.

In the next Chapter; I will focus on laying the groundwork for revising the ability hypothesis into an argument in favour of the knowledge argument, rather than against it, by appealing to Wiredu's interpretation of the Akan concept of mind. Recall, the ability hypothesis claims that "knowing what an experience is like just *is* the possession of abilities to remember, imagine, and recognize" (*author's italics* Lewis 2004: 100). For Lewis having such should be taken not as,

> possession of any kind of information, ordinary or peculiar. It isn't *knowing that* certain possibilities aren't actualized. It isn't knowing that. It's knowing *how*. Therefore, it should be no surprise that lessons won't teach you what an experience is like (Lewis 1990: 516).

Similarly, Nemirow's perspective is that "knowing what an experience is like is the same as knowing how to imagine having the experience" (1990: 495). I motivate my choosing the ability hypothesis as my preferable rejoinder in the following section; even though the former argues against phenomenal knowledge. The ability reply is a negative response as it argues against phenomenal knowledge; however, it could be interpreted as actually being for phenomenal knowledge if augmented or interpreted via Wiredu's interpretation of the Akan concept of mind. The Akan conception of mind will be my focus in the next Chapter, where I provide a framework of Wiredu's interpreted Akan concept of mind. In my view, it can potentially become a positive hypothesis favourable to Jackson: a non-reductive physicalist (NRP) "qualia freak". My decision to select the ability reply is based on the view that claiming that Mary does not really acquire new knowledge but only an ability, relates to the concept of subjective experience. Significantly, my argument will seek to show that Wiredu's quasi-physicalist perspective, the view that the mind is a cognitive faculty and not a materially existing entity or substance, also points us in the direction of subjective experience (SE) debates as context for a potential positive response to Jackson's knowledge argument against reductive physicalism (RP).

Chapter 5: Introducing Quasi-Physicalism

5.1. Introduction

In the last Chapter, I looked at responses to Jackson's knowledge argument and the counter-objections. In order to discuss the counterarguments, I outlined two groups: group *a* who argue in support of Jackson's anti-physicalist stance, against the attack on Jackson via the ability reply. In *group b*), were those who argued in defence of reductive physicalism (RP) against Jackson via the old/new knowledge reply. These counter-objections have remained unsatisfactory responses either way: that is, as shoring up Jackson, or as arguing that the reductive physicalists have done a shoddy job against the ability hypothesis.

In this Chapter, I again examine the nature of mind as a metaphysical problem, aiming specifically at Kwasi Wiredu's (1987) notion of the Akan concept of the mind, an interpreted 'nonsubstance' view. According to Wiredu, "the Akan concept of mind has some affinities (though not an equivalence) with the contemporary, computer-inspired, theory of mind in Anglo-American philosophy called functionalism" (Wiredu 2002: 62) and I will come back to this point. Firstly, I situate the discussion by briefly mentioning some examples of the mind-body problem in African philosophy[144]. This pause only seeks to give a background to the nature of my discussion in this Chapter in terms of African philosophy of mind as part of "mainstream" philosophy[145]. There are various conceptions of mind to be found in the

[144] African philosophy is a statement of both struggle and an expression of profound metaphysical and epistemological significance. My approach is informed by assumptions such as posited by Mungwini (2019), who I think makes a significant point, when he argues, "It is my conviction that African philosophy has a historic responsibility to the peoples of Africa in terms of not only restoring the honour that the continent has lost as a result of its colonial nemesis, but in helping Africans engage with the rest of the world in the universal quest for truth and knowledge" (Mungwini 2019: 12). However, I do not think the responsibility should only be evaluated on a historical basis, an even more central discussion is that African philosophy has to gear up for an equally important alternative responsibility in that quest for universal truth and knowledge. African philosophy has to maintain equal visibility with other philosophical traditions to contemporary issues e.g. artificial intelligence (AI), climate change, human migration, and so on.

[145] O'chieng-Odhiambo, F. (1994). "The significance of Philosophic sagacity in African Philosophy". *Doctoral thesis.* (University of Nairobi).

traditional African philosophy, but the conceptions as diverse as they are, exhibit a "basic similarity" (Wiredu 2004: 16), namely that there are two components to a human, namely a physical and non-physical (referred to as 'spiritual' by some thinkers such as Gyekye) aspect; for instance the Luo (Kenya), Igbo and Yoruba (Nigeria), Nguni (Zulu, Ndebele, Swati, and Xhosa) (South Africa), Chewa (Malawi) Shona (Zimbabwe), Akan (Ghana) and so on. Secondly, I aim my focus on three specific attempts at conceptions of the mind in African philosophy, I start with 1) Segun Gbadegesin's (1991)[146] address on the Yoruba concept of person, then 2) I engage Wiredu's (1983)[147] interpreted work on the Akan concept of mind and lastly, 3) I address Kwame Gyekye's (1987) opposing reflections[148] on Akan personhood.

Broadly construed both the Yoruba and Akan believe that a person is a body and some other entities, that is, a person is physical (bodily) and also somehow extra-bodily (Majeed 2014: 44). I do not intend to imply that it is only these two cultures with such a conception of a person, or that it is only them who are concerned with the mind-body problem, rather I have selected them for the purpose of developing my thesis as they offer some example of the diverse accounts of the mind and the person in African philosophy – e.g. the fact that Gyekye's perspective is a substance dualist perspective while Wiredu's is quasi-physicalist, not accepting the mind as a substance.

Wiredu's interpretation of the Akan concept of mind is the main voice in my discussion of African philosophy of mind. I would like to emphasise that Wiredu has not published a lot, specifically on the mind, except for his famous 1987 paper and a few snippets here and there.

[146] The article "*Eniyan*: The Yoruba concept of person" was first published in 1991, in this thesis I refer to the reprinted version that was published in 2002 with the same title.
[147] For this thesis I quote the reprinted version published in 1987. The original article was published in October 1983, titled "The Akan Concept of Mind" *Ibadan Journal of Humanistic Studies*, No. 3, University of Ibadan: Nigeria. The article evolved and was later reprinted in 1987 with a new title "The concept of mind with particular reference to the language and thought of the Akans" in *Contemporary Philosophy: A new survey*.
[148] I say opposing to highlight the dispute between him and Wiredu on the characterization of Akan concept of person.

However, the issue emerges in the discussion of personhood which is exemplified in the debates in Safro Kwame's *Readings in African Philosophy: An Akan Collection*.[149] Secondly, there may sometimes be some lack of synchronisation on aspects of the Akan view due to nuances of translation, which is why I focus on Wiredu's version, and not Gyekye's version of this view. Wiredu (2002) has called Gyekye's version a "decidedly Cartesian understanding of Akan data" (2002: 61). As such, rather than claiming to be discussing or applying 'the' Akan view of mind, my focus is specifically on Wiredu's view. The reason for focusing on Wiredu (1987) is not necessarily that I think the Akan's – or Wiredu's interpretation of the Akan – account of mind is the best African one, but rather that I see a way to formulate a strong positive reply to Jackson's knowledge argument by combining Wiredu's view with Lewis' version of the ability reply to Jackson. And, I think this is an important contribution to the global philosophical debate as it illustrates the advantages of reading Western and African philosophy together.

In this regard, there are two issues here which I aim to keep separate: (1) the philosophical basis of Wiredu's concept of mind, and (2) the translation issues on constituents of Akan personhood from which (1) emerges. The latter I shall pursue only for clarification purposes of the former (1).

The focus of this thesis is settled on two main voices:

1) Wiredu's quasi-physicalist interpretation of the Akan concept of mind, and
2) Frank Jackson's property dualist attack on reductive physicalism (RP)[150].

However, I refer to other African and Western thinkers as I discuss and critique these two thinkers' views. I do not intend to be seen as an advocate of exclusivity but rather, primarily,

[149] I am grateful to Prof. Bernard Matolino (UKZN) for email exchanges (April-May 2019) on this issue.
[150] Refer to Chapter two for details on NRP (non-reductive physicalism) and RP (reductive physicalism).

I aim at a conversation between those two main voices. In terms of African philosophy my aim will be to give a concise outline of the developments on the mind-body problem in African philosophy's journey of "self-definition" (Wiredu 2004: 1). I take Western philosophy as already having adequate, accessible, and developed historical information, so I do not include a historical survey in terms of mind-body problem in the West, and I have anyway given a lot of discussion in this regard in the beginning of this thesis.

5.2. Developments in the mind-body problem in African philosophy

As I offer this selective historical survey, allow me some remarks on the status of African philosophy to give context to my endeavour to formulate a reply to Jackson that combines aspects of an African and Western philosophical account of the mind. Let me point out that debates surrounding the nature and status of African philosophy in contemporary philosophical corridors are still prevalent in some contexts, as such, the few remarks are not intended to be tangential to my thesis. I address this thesis within the context of contemporary philosophy debates that have already positively settled the question of the validity of African philosophy, despite some negative voices, e.g. Matolino (2008), Mungwini (2019), who argue against the division of African philosophy according to so-called 'trends' (see e.g. Oruka 1991)[151]. My take is that Oruka's delineation of the approaches[152]is to simply give a kind of compass to the reader of African philosophy. Furthermore, though Mungwini (2019) and Matolino (2008) might have sincere concerns; in my view their concerns have been adequately addressed and "the existence of African philosophy is difficult to deny" (O'dhiambo 1994: 6)[153]. On this note also consider the philosopher, D. A Masolo's remark

[151] Oruka categorised them as ethno-philosophy, philosophic sagacity, nationalistic-ideological philosophy, professional philosophy, hermeneutic philosophy, and artistic or literary philosophy (Oruka in Coetzee and Roux (eds.) 1991: 101).
[152] Oruka's fourfold classification strategy have been criticised as either flawed or too limited, according to Coetzee and Roux (1991, Preface to Second Edition).
[153] F. Ochieng' – Odhiambo (2010) makes an interesting commentary on by Rev. Placide Frans Temple's *Bantu Philosophy*: he credits that seminally the notion of African philosophy (ethnophilosophy) was introduced in the

that "African philosophy [cannot] continue to be regarded as an informal discourse that takes place only in undertones or around night-time bonfires, away from the daytime and formal engagements of the academy" (Masolo 2010: 3).[154]

When we now turn to the African concept of mind, there are two points to keep in mind. Firstly, I do not seek to extoll the Akan traditional perspective over the perspectives of the Luo, Yoruba (see Segun Gbadegesin 1998), Nguni (Zulu, Ndebele, Swati, and Xhosa), Shona[155] (see Samkange and Samkange 1980), and so on, on the concept of mind. I include a discussion of the Yoruba concept of mind through their concept of personhood, and I offer an alternative interpretation of the Akan concept of mind, by giving a brief overview of Gyekye's notion of the Akan concept of mind. I cannot however do more due to limits of space.

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written literature in the mid-forties (O'dhiambo 2010: 26). It is common knowledge that Temples embarked for the Congo Basin as a Belgian missionary. He is famously known for what I believe was not his primary aim for the voyage. His purpose in the Congo was to convert people as a Catholic missionary priest. He notoriously once said "I believed I was the messenger with a message from Above" (http://www.aequatoria.be/tempels/bio.htm). Rather, he is celebrated for a secondary aim, his search and presentation of African culture (Baluba culture – the Baluba are a Bantu group within the lower Congo in Central Africa) from where he draws what he termed "a Bantu philosophy" (Tempels 1959: 8), something that emerges from culture and that became the title of a book he wrote:*- *La Philosophie Bantoue* (1945), and translated into English as *Bantu Philosophy* (1959) (Oruka 1987: 46). According to Johann Hattingh, in a preface to *African Philosophy and the Quest for Autonomy: A Philosophical Investigation*, the book *Bantu Philosophy*, brought to the fore, "[…] the invention of the African subject by European anthropologists and missionaries in terms of binary oppositions such as savage vs. civilised, prelogical vs. logical, perceptual vs. conceptual, oral vs. written and religious vs. scientific – conceptual doubles that are clearly ethnocentric in origin" (Biakolo 1998: 1-14 quoted in Praeg 2000: i). The publication is often considered a classic – the earliest attempt to presenting African philosophy (Praeg 2000: 135), with other calling it "an African philosophical tendency" (Komo 2017: 83). Reactions to the debate that arose with that publication came from Kwasi Wiredu, Paulin Hountondji, P. O. Bodunrin, Kwame Antony Appiah, Kwame Gyekye, Emmanuel Eze and V.Y. Mudimbe, among others.

[154] Masolo (1994) inadvertently presented us with what African philosophy seems to have lacked (a method), i.e. a systematic appraisal of both ontological and epistemological issues in various instances of traditional African thought vis-à-vis the West, what he has since called "excavating Africa in Western discourse" (Masolo 2010: 147).

[155] Pascal Mungwini (2019). *Indigenous Shona Philosophy: Reconstructive Insights*. Grahamstown: NISC. An exploratory text on the thinking of the indigenous Shona people inhabitants of the present-day Zimbabwe. Who is Shona? "In historical terms, 'the culture now classified as "Shona" originated from Bantu settlements on the high fertile plateau between the Limpopo and Zambezi rivers, bounded in the East by the drop towards the coast and in the West by the Kalahari Desert' (Bourdillon 1987:6). The Shona are the founders of the ancient Great Zimbabwe civilisation and the builders of the Great Zimbabwe UNESCO world heritage monument" (Mungwini 2019: *xiv*).

Secondly, my use of "an African conception of mind" is with a disclaimer – related to point 1 above – I do not mean to imply homogeneity in the African concept of mind; it is not contested that "African" connotes a culturally and ethnically diverse society (Abraham in Wiredu 2010: 14). For example, Gyekye and Wiredu were Akan compatriots as well as colleagues, however, their views on the Akan concept of mind, though rooted in discussions on the Akan conception of personhood, "that give the impression of a tripartite conception" (Gyekye 1995: 159), have provided competing perspectives, as I will show below. Rather what I intend with referring to an African concept of mind is to make the point that also in the philosophy of mind, African voices have important contributions to make and should not be silenced as uncredible because they are African.[156]

As I have already stated, this chapter proceeds as a metaphysical enquiry show-casing three specific African conceptions of the mind-body problem: firstly, Gbadegesin's Yoruba concept of mind; secondly, Wiredu's interpretation of the traditional Akan concept of the mind and lastly, Gyekye's interpretive reflection on Akan personhood. Wiredu and Gyekye were colleagues who have offered opposing perspectives on the Akan concept of mind that emerge from Akan personhood. According to Wiredu (2010: 10) "not all our interpretations of Ghanaian traditional thought coincides". In his view there is one major point of doctrinal disagreement, he says:

> Another major disagreement between Gyekye and me relates to another aspect of the traditional concept of a person. Gyekye understands the conception to be dualistic, somewhat after the manner of Descartes, while I interpret it to be quasi-monistic, featuring not an ontological duality of the material and the immaterial, but only differences in degrees of materiality between the body and the other elements in human personality (*ibid.*).

[156] Hence my thesis reflects a concern with the impact of epistemic injustice, as coined by Miranda Fricker (2007) in her book *Epistemic Injustice: Power and the Ethics of Knowing*.

Having noted these differing views of mind that exist, among several others; in my view, we can find a novel perspective on the knowledge problem when we turn to the Akan view of mind, specifically Wiredu's account of it vis-à-vis Gyekye's account[157]. Wiredu's quasi-monistic (quasi-physicalism), is based on the traditional Akan concept of the mind as set out in Wiredu's (1987) hermeneutical paradigm on Akan linguistics. This hermeneutical approach by Wiredu,

> consists of [the] philosophical analysis of concepts in a given African language to help clarify meaning and logical implications arising from the use of such concepts (Oruka in Coetzee and Roux (ed.) 1998: 101).

The perspective is inherently interpretative: i.e., philosophy is viewed as the product of language, context, and history, and hence inextricably linked to culture (Komo 2017: 81). After the above preliminaries I begin now my consideration of the African context of the mind-body problem by discussing the Yoruba concept of person.

5.2.1. Gbadegesin's Yoruba concept of person

The Yoruba are an ethnic group that inhabits parts of West Africa, particularly in South-western Nigeria. In Yoruba thought there is a tripartite conception of a person; the "two *main* elements (the physical and the spiritual) of a person, […] and a third element, known as *ori*, it is also spiritual whose function it is to determine human destiny" (Makinde 1984: 189). I will give a cursory tour of these elements below.

Segun Gbadegesin (2002), begins his discussion of the Yoruba concept of mind by giving a specific disclaimer on the scope of his discussion of Yoruba personhood. His discussion is only limited to Yoruba traditional thought as he has an "intuitive understanding of the Yoruba language" (Gbadegesin 2002: 208) being Yoruba himself. However, he also points out that he

[157] See "The Akan Concept of a person" which was first published in 1978, I refer to the Excerpt, reprinted from *African Philosophy: An Introduction*, ed. Richard A Wright, 1984.

draws some "similarities and differences through comparison with the Akan conceptual scheme" (*ibid.*). The Yoruba hold a tripartite conception of a person, apart from the *ara* body (physico-material part) and soul (spiritual) and there is a third element, spiritual, of a person (*ori*) inner head whose function it is to determine destiny (Makinde 1984:189).

For the Yoruba, within their traditional conceptual scheme, a person is constituted of an ensemble of four important entities*: ara* (human body comprising all physical-material parts), *okan* (physical organ) "which serves a dual function of circulating blood and is also source of emotional and psychic reactions" (Kaphagawani 2006: 334), *emi* (nonphysical, principle of life element put in place by the deity), together with *ori* (inner head) "perceptible to our senses and described analytically in anatomical terms" (Ademuleya 2007: 213). When clustered together; that is, according to how the entities relate to each other in terms of their functional interdependencies (Gbadegesin 2002: 208), that is referred to as *ènìyàn* which is 'person' in Yoruba. Note, in Yoruba "*ènìyàn* has a normative dimension as well as an ordinary meaning" (*ibid*.), and emphasis is placed on the normative dimension. According to Masolo (2010), the Yoruba concept of person (*ènìyàn)*[158], that is,

> at the everyday folkloristic or popular level, is thought of as a living pantheon of sorts, because in the Yoruba conceptual scheme a person is viewed as an amalgam of different divine elements supplied and controlled by the originating divinities (Masolo 2010: 150).

In the philosophy of mind, the ontological questions about a person may be said to revolve around the unity or compartmentality of the human being (Majeed 2014: 43-44). And, whenever divisibility of the person is suggested, further questions are usually raised and the functions and relationships between the various entities would naturally seek corresponding *explanandum* for such compartmentalising of the entities that constitute a person.

[158] *Eniyan* denotes personhood beyond mere biological identity and selfhood […] it "includes the external and internal components" (Gbadegesin 2002). "*Eniyan*: The Yoruba Concept of a Person" was published in 1991 a few years after the publications of works by Wiredu (1987) and Gyekye (1987) on the traditional Akan concept of personhood.

For Gbadegesin, "there is a lot of confusion about what each of these [elements: *ara*, *okan*, *emi*, together with *ori*] means and what relationship exists among them" (Gbadegesin 2002: 209), although what is clear, is that this is a dualist approach. *Ara* (body) is the physico-material part of a human being (*ibid*.), it is held together with the purely non-physical entity (*emi* – the soul) (Majeed 2014: 44). *Okan* (the heart) is another constituent element that is part of the human being, "the physical organ that is responsible for the circulation of blood" (Gbadegesin 2002: 210). As a last element making up the person, is the *ori* (the head, 'inner head') which "refers to the physical head and, given the acknowledged significance of the head vis-à-vis the rest of the body" (*ibid.* 214). The *okan* and the *ori* are described as partly physical and partly non-physical (Majeed 2014: 44). Typical Yoruba refer to *ori* as meaning a non-physical component of person (the bearer of a person's destiny […] as well as determinant of one's personality" (Gbadegesin 2004: 314). I hope my brief discussion of these prominent entities that are part of what constitutes Yoruba concept of person will become clearer when I discuss the Akan concept below, from where Gbadegesin (2002) draws resemblances and divergences.

Irrespective of the need or rather the urge to engage beyond the basics I have outlined on the Yoruba concept of a person (*ènìyàn*), space and scope will not allow me to go beyond the discussion above.

In the next section, I discuss an example of the hermeneutic approach: The Akan concept of the mind as interpreted hermeneutically by Wiredu (1987).

5.2.2. Wiredu's interpretation of the Traditional Akan Concept of the Mind

Briefly, as introduction, according to Wiredu (1987), the traditional Akan view of the mind (*adwene*)[159], is as "the function of thought" (Wiredu 1996: 16). This should be interpreted as the view that the mind does not exist in the body, but rather it is a cognitive capacity. This determination of mind as a cognitive capacity is implicit in the Akan language and their corpus of communal beliefs: for the Akans "mind [*adwene*] is intellectual […] just for thinking" (Wiredu 2004: 204; 1987: 172). It is on this view of the mind that the philosophical upshot of Wiredu's quasi-physicalism view is based. Noteworthy, an interpretation urged by Wiredu (1987), clarifies that *adwene* "is never mentioned in any enumeration of entities that unite to constitute a person" (Wiredu 2004: 16). This is interesting, as neither does mind seem to be part of what constitutes a person for the Akan. However, I offer some discussion of the main constituents that unite for Akan personhood *okra* (a life-giving entity), *sunsum* (that which gives a person's personality its force), *nipadua* (body) and *mogya* (blood) but this is only for clarification purposes, meant to bring out a better understanding Wiredu's interpretive philosophical take on *adwene*.

In 1983, Wiredu published "The Akan concept of mind"[160]. The article evolved and was reprinted as a book Chapter "The concept of mind with particular reference to the language and thought of the Akans"; exactly thirty years after the attainment of Ghana's Independence[161]. The chapter discussed a metaphysical perspective of the mind with reference to the traditional Akans of Ghana (Wiredu 1987: 153), i.e. his native folk. Wiredu embarks on his inquiry by seeking to identify the equivalent of the word 'mind' when it is

[159] As translated into the Akan language.
[160] See footnote 147.
[161] Ghana became independent in 1957

translated to Akan[162], so that he can elucidate the concept of mind at the heart of his discussion of the nature and merits of materialism/physicalism.

The view that Wiredu derives from this analysis is now formalised as quasi-physicalism[163], which is an approach of the concept of mind that offers a non-dualist (monist) "understanding of reality" (Masolo 2010: 141). As pointed out earlier, I see a way in which this account of the mind can inform specifically the ability reply to the knowledge argument, by actually transforming it into a positive reply to the argument. Wiredu, according to Masolo, in *Cultural Universals and Particulars,*

> … has compellingly argued in defence of what he calls the quasi-physicalist position for the Akan, according to which the human mind, conceived as the functional capacity of the brain to formulate ideas and concepts, […] (Masolo 2010: 244).

Lastly, I am guided in my selection of Wiredu's work, and in the following discussion of Wiredu as a quasi-physicalist, by a point made by Masolo (2010), where he states;

> [T]here is an important difference between Wiredu's monistic (quasi-physicalist view of the individual and the Dogon or Yoruba views that, at least in their appearance through ethnographic texts, are pluralist. Wiredu's position expresses only the narrow view […] (Masolo 2010: 245).

I look specifically to limit my focus to what Masolo refers as Wiredu's "groundwork for the metaphysics of mind, namely the processes that make mind a dispositional rather than a substantive reality" (Masolo 2010: 139), given the aim of the thesis to turn the Western ability reply to the knowledge argument into a positive support for it, with the help of Wiredu's interpretation of the Akan concept of mind.

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[162] According to Wiredu 'mind' is rarely directly translated, it may be surmised that this is because in the Akan inventory of entities that go to constitute a human person nothing that might be called the equivalent of 'mind' is mentioned (1996: 96).

[163] According to Safro Kwame, the term quasi-physicalism was coined by Kwasi Wiredu to capture the view of the traditional Akans who, "consider the mind (adwene), in a non-substance way, as a capacity of an individual or entity while acknowledging the existence of God, 'souls', and ghosts as non-human objects that may eat, drink, clothe themselves, and be spatially located without obeying all the known laws of physics" (Wiredu 1987: 161).

Back to Wiredu; "[b]eing born and bred an Akan" (1987: 154) he reflects on the Akan linguistical engagement with metaphysical concepts: "[…] from an intuitive understanding" of his people and their linguistic framework (*ibid*.). I agree with the reasons put forward by Wiredu for restricting his discussion to a specific ethnicity – the Akan, viz., to keep the discussion within "reasonable anthropological bounds" (Wiredu 1987: 153). The other reason for this focus is an effort to avoid the generalisations that are common in traditional African philosophy. Wiredu also points out two further pertinent issues that inform his reflections on Akan traditional thought which are: 1) he presents what he calls the "most usual" (Wiredu 1987: 154) conception. This means he does not want to give an implication that all traditional Akan have a monolithic corpus of ideas, since their beliefs vary (*ibid*.).[164] And 2) this is a disclaimer remark about *his interpretation* of the language (traditional Akan).[165] Overall, I think O.A. Oyowe makes an acceptable comment on Wiredu's take on the traditional Akan on mind (*adwene*):

> Wiredu describes it as the Akan concept of mind. I prefer to describe it as Wiredu's for the simple reason that he believes that it is not necessarily held by all Akans and ultimately, he is the one primarily responsible for it – not any other Akan, who may well disagree with his account of mind […] (Oyowe 2015: 5).

In my turn, my inquiry into this article[166] by Wiredu seeks to find "some points of philosophical significance" (Wiredu 1987: 154) within the Akan traditional thought, which I will propose as Wiredu's interpretation, to be accommodated as one representative of the

[164] For example, Safro Kwame states that it obvious that the mind-body problem does not arise for Akans (Kwame 2004: 349); such an assertion is contested, as "untrue" (Majeed 2013: 27) yet they all seem to draw from traditional Akan concepts.
[165] "I do not mean to attribute wholesale the conclusions I reach in my interpretations of the Akan language to the traditional Akans, and I hope it will be sufficiently clear where a suggestion is the result of my own critical or reconstructive reflection on Akan date" (Wiredu 1987: 154).
[166] "The Concept of mind with particular reference to the language and thought of the Akans" (Wiredu 1987: 153-177).

African conception of the mind, keeping my own disclaimers in the beginning of this section in mind[167].

As mentioned earlier, Wiredu's (1987) reflections focus on translation of languages. Language is at the core of the articulation of concepts, and thus understanding and exploring translations are key in informing how a concept is understood by a given language group. Majeed[168] seems to be receptive to Wiredu on the issue of translation, however, he clearly states that "translations are heavily contested in Akan thought" (Majeed 2017: 145). For example, Wiredu (1987) and Kwame (2004) disagree with Gyekye (1992; 1995; 1997)[169] on how to postulate the *okra* as quasi-physical "aspects of human personality (*okra* and *sunsum*) which are not completely 'physical'" (Wiredu 2002: 61); for Gyekye, the *okra* acquires a "substantive" identity[170] of similar status to Plato and Descartes's characterization of soul (Majeed 2017: 145-146); while other Akan philosophers e.g. Majeed (2013)[171], and Martin Odei Ajei (2012)[172] affirm the metaphysical characterization of *okra* (Majeed 2017: 146). Lastly, I cannot do more than mention these contested issues regarding the "correct" translation of Akan terms given the scope of my project and thus I take Wiredu's postulation as my position for this thesis.

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[167] E.g. Introduction to this section.
[168] Hasskei Mohammed Majeed (2013) has in recent years criticised Wiredu and Kwame's interpretive take of the Akan traditional concept of mind, quasi-physicalism – which he labelled "conceptually flawed in diverse ways, and as such philosophically indefensible" (Majeed 2013: 23). Majeed's (2013) critique is based on his support for a metaphysical theory that is focused on his spiritual designation of some of the entities that make up the person in Akan beliefs viz. '*okra*' and '*sunsum*' which, when translated, could mean "soul or mind" and "spirit"[168]. Also, Majeed is more inclined to Gyekye's position (Majeed 2013: 25), which is discussed in the next section.
[169] Kwame Gyekye has published widely, I have selected these few works which are relevant for my purposes in this thesis: *An Essay on African Philosophical thought: The Akan conceptual scheme* (1987) and *Tradition and Modernity*: *Philosophical Reflections on the African Experience* (1997); and *Person and Community* (1992).
[170] Mogobe Ramose, *African Philosophy through Ubuntu* (Harare: Mond Books, 2002). Segun Gbadegesin, "Èníyàn: The Yoruba Concept of a Person," in *Philosophy from Africa*, ed. P. H. Coetzee and A.P.J. Roux, 2nd ed. (Cape Town: Oxford University Press Southern Africa, 2002).
[171] Majeed, H. M. (2013). "A critique of the Concept of Quasi-Physicalism in Akan Philosophy". *African Studies Quarterly*. Vol 14, Issues 1 & 2. pp 24-33
[172] Ajei, M. O. (2012). "Problems with Wiredu's Empiricalism," *Legon Journal of the Humanities* 23. Pp 185-204.

After the above preliminaries, let us focus the discussion on the issue of the translation of the concept of mind: beginning with the word 'mind' in the Akan language, this signals the beginning of the explorative inquiry into the Wireduean, Akan concept of the mind. The word 'mind' is translated as '*adwene*' in Akan (Wiredu 1987: 157), which is referring to mind, interpreted as having a "non-substance character" (*ibid.*). Note, such a nonsubstance theory is not peculiar to Wiredu's Akan view, Gilbert Ryle in *The Concept of Mind,* also advocated a nonsubstance theory. In English however, 'mind' is susceptible to either a substance or a nonsubstance interpretation (*ibid.*), i.e. its background semantics in English ordinarily and adequately "reflects elements of both the technical and folk philosophies of the people to whom it belongs" (Wiredu 1987: 156). As in the Akan language, '*adwene*' is susceptible to a nonsubstance interpretation (*ibid.*), because it refers to a cognitive function, it cannot be the exact equivalent of what is implied in its English usage. This interpretation of mind (*adwene*), as I have already mentioned, is urged by Wiredu (1987), and clarifies that *adwene* "is never mentioned in any enumeration of entities that unite to constitute a person" (Wiredu 2004: 16). Wiredu (2004) places emphasises on the aspect that the mind (*adwene*) is never thought of as an entity, when he states "if mind were thought of as an entity, this omission would be totally explicable" (*ibid.*).

Therefore, another translation in English for *adwene* as 'thought' (Wiredu 1987: 157) is considered. In this translation *adwene* is the noun form of the verb '*dwen*' which means 'to think" (*ibid.*). However, this translation raises a problem in the English language, since 'mind' and 'thought' do not suggest the same semantic relationship (*ibid.*) in this language; though some (native English speakers) are naturally inclined to "think of mind as that which produces thought" (*ibid.*). For native Akans this would not apply, since for them 'mind' is a "[…] function of thought" (Wiredu 1996: 16), and not the source of thought. In the Akan language and implied in their conception of mind; "mind [is] a function rather than an entity"

(*ibid.*). Wiredu (2002) is clear in his interpretation, "a*dwene"* is not an entity, it is a capacity dependent on the functioning of brain "*amene*" (Wiredu 2002: 61). Recall Masolo's (2010: 139) comment that Wiredu makes "the mind a dispositional rather than a substantive reality".

Also, for the Akan, thinking results from the person, '*onipa*' (Wiredu 1996: 16), whereby 'person' refers to "some part or aspect of the person" (*ibid.*) e.g., the brain "*amene*" (Wiredu 1987: 158; Majeed 2013: 24) in their language. So, to some extent, the Akan language seems to imply mind comes from (a person's) brain, as mind is viewed as a function of thought and thought is viewed as coming from an aspect of a person such as their brain. In this context, this understanding of the concept of mind could be pointing to a physicalist view, as it seems to be close to the physicalist slogan that the mind is what the brain does.

To clarify on a possible conceptually faulty hypothesis that might arise, it would be important to note, now in terms of the Akan view of personhood, that

> […] the Akans traditionally believe that a person is made of '*nipadua*' (body), '*okra*' (a life-giving entity), and '*sunsum*' (that which gives a person's personality its force) (Wiredu 1987: 161).

The use of these terms to make distinctions seeks to avoid the possibility of what Gilbert Ryle has illustrated by the notion of a category mistake (Ryle 1949: 17-20)[173]. A category mistake

[173] Gilbert Ryle outlines what he calls 'the official theory' on the mind-body problem at the time in his article "Descartes' Myth" (Ryle in Chalmers 2002: 34). According to Ryle, the official theory – Rene Descartes' substance dualism – is a mistake of a special kind (*ibid.*), he calls it "a category-mistake" (*ibid.*). It represents the facts of mental life as if they belonged to one logical type or category (or range of types or categories), when they actually belong to another (*ibid.*). To specify, Ryle illustrates what is meant by a category mistake by enumerating a series of examples. His first illustration is of a foreigner visiting Oxford or Cambridge universities and wanting to know where the university is, despite having seen several components that when put together (not just physically) represent the University (Ryle in Chalmers 2002: 35). The second illustration is of a child witnessing soldiers' march-past (of battalions, batteries, squadrons, and so on) and yet the child asks to see the division (*ibid.*), and lastly, a foreigner watching a game of cricket (bowlers, batsmen, fielders, umpires, and so on) for the first time and expects to see someone whose role is to exercise *esprit de corps* (*ibid.*). Similarly, the University of Pretoria is comprised of the Hatfield, Groenkloof, Onderstepoort, Prinshof Mamelodi and Sandton (GIBS) campuses, the Merensky Library, the Art Galleries, student residences, HPC sport facilities, the Graduate offices, and so on. It is then a category-mistake when one fails to co-ordinate how all these put together represents the University. One cannot ask where the University is as if the University of Pretoria is something outside those entities. As Ryle points out, a common feature about category-mistakes is that they, "are those made by people who are perfectly competent to apply concepts, at least in the situations

is a radical mixing-up of different categories, "specifically, of the categories of concept and object at one level and of the categories of potentiality and actuality at another" (Wiredu 1987: 159). Wiredu asserts that, for the Akan who conceive '*adwene*' in an exclusively nonsubstance way, the mind is a "logical construction out of actual and potential thoughts" (*ibid.*). For the Akan, Masolo asserts,

> […] mind is not physical in the same measure as the body is, so it is neither an appendage of the body nor identical with it, but it is a functional (responsive) property of the specifically human body by means of which it learns cognitively to respond to its surroundings. (https://science.jrank.org/pages/7766/Humanity-African-Thought.html).

As such, the mind '*adwene*' is never posited by the Akan as one of the constituents of a person (Wiredu 1987: 159,160–1), but rather as an *ability* they have. Because of such a view, a potential category mistake for the Akan that could have resulted is avoided, unlike in the West (*ibid.*). Recall, Ryle states that we make such a category mistake when we assume that new concepts resulting from consideration of the function of an entity indicate the existence of a new entity separate from that which performs the function. Wiredu cautions that there is need to be wary of the difference between the brain (species of object that does the thinking) and mind as an immaterial entity, a non-object possibility and as a function of thought (1987: 159,160–1). I find Oyowe's comment on Wiredu's assertion on the Akan conception of mind to be welcomingly explicit: "as far as Wiredu is concerned, mind is not a thing at all" (Oyowe 2015: 5).

Continuing to consider the conceptual issues that arise when Western and Akan concepts for analysing constituents of human persons are considered, and also, importantly, outlining the origin of the quasi-physicalism from which Wiredu offers his concept of mind, consider for example that in Western philosophy, the 'soul' is supposedly, a "purely immaterial entity that

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with which they are familiar, but are still liable in their abstract thinking to allocate those concepts to logical types to which they do not belong" (Ryle in Chalmers 2002: 35).

somehow inhabits the body" (1987: 161). Gyekye (1995) opts for something similar; identifying '*okra*' as that which is equivalent to the Western articulated 'soul': '*okra*' is on this reading only a part of the defining features of personhood in the Akan language. I will revisit this view when I discuss Gyekye's Akan concept of person below. Wiredu does not subscribe to such a view of *'okra'* as for him, *'okra'* is not a Cartesian soul as stated before, but, in fact;

> The '*okra*', […], is a quasi-physical [entity]. It is not, of course, supposed to be straightforwardly physical as it is believed not to be fully subject to spatial constraints. Nor is it perceivable to the naked eye. Nevertheless, in some ways it seems to be credited with para-physical properties (Wiredu 1987: 161).

Quasi-physicalism is the philosophy that considers the soul as;

> … belonging to a category between the realm of the obviously physical, i.e. those objects that obey the known laws of physics, and the realm of the so-called spiritual or completely immaterial objects …. In line with this philosophy, therefore, the *okra* of a living or dead person is deemed to be quasi-physical. For, that is the form in which the *okra* (of a dead person for instance), when it reveals itself to the living, is thought to be (Majeed 2013: 25).

For Majeed such a translation designates spiritual connotations for Akan thought, which would suggest that the *'okra'* is,

> spiritual […], and does not form part of the brain or body […], it is believed to play some role in the person's ability to live, as it is seen to be a life force with spiritual attributes (Majeed 2013: 23).

Such a spiritual aspect of the person (that which survives death) is preferable (*ibid*: 24). Majeed (2013) writes,

> […], it would be difficult not to start with or, at least, include the most obvious (i.e. the physical realm) in the exploration or explanation of the spiritual realm, if the explanation is to convince anybody of the existence of a spiritual entity or event. In any such case where the metaphysical is postulated, the rationality or acceptability of the postulation would most likely be based on the possibility of a mutual, cross-realm affectation or causation. That is, the strength of the evidence for a causal relation between the physical and the purported metaphysical realms would be crucial for a possible understanding

> of the metaphysical. But this role played by the physical does not in any way call for the description of a metaphysical entity itself as para-physical […] (*ibid*: 26).

According to Wiredu however, a spiritual designation of '*okra*' as espoused by Majeed (2013) for instance, is problematic for the Akan, based on two issues that arise from the Akan description of '*okra*' as a (life giving entity). Firstly, this description of '*okra*' makes it a serious principle that is not merely symbolic, but quasi-physical, since it signifies something that can be communicated[174] with and be perceived (Wiredu 1987: 161). Wiredu explains the idea of '*okra*' as perceptible when he says,

> Highly developed medicine men are claimed to be able to enter into communication with an *okra*, and those that have eyes with medicinally heightened perception are said to be capable of seeing such things (*ibid.*).

Wiredu excavates this way of understanding '*okra*' from Rev. H. Debrunner (1961) in his book *Witchcraft in Ghana*, which focuses on the belief in destructive witches and their effect on the Akan tribes. Majeed thinks this view from Debrunner is inaccurate and has misled Wiredu (Majeed 2013: 27), since according to him, it makes no sense in the Akan language to speak of 'my *okra's* head' 'my *okra's* legs' and so on (*ibid:* 27-28.). Majeed argues that Wiredu's position is not defensible, he insists;

> the *okra* is deemed in Akan thought as a spiritual entity. As such, the capacity of the medicine men to "see" it—as a result of their spiritual potency— does not negate the conception that it is fundamentally spirit (Majeed 2013: 31).

Secondly, from the description of '*okra*' as a life-giving entity, Wiredu (1987) explains how the description directs '*okra*' to be conceived as a person's double or companion; leading to a

[174] Masolo explains the communication intimated here as follows, "Communication is basically a system by which humans emit and receive noises, and the capacity to organize these noises when they are received is a basic event in the chain of stimulus response behaviour among members of the species. A successful communication involves, then, the organization of noises (or other symbols that substitute for them) to determine the nature and exact aim of the stimuli and then give them the appropriate response, a process that is generally referred to as comprehension or understanding. This capacity is within, is part of, the human bodily nature. It is specific to human nature as an endowment of its organism, and it is borne into action by the communicative stimuli of others" (2010: 142).

conception that describes it as having a head, legs and all (Wiredu 1987: *ibid*.). In this context of '*okra*' being described as person's companion, Wiredu quotes from Kofi Asare Opoku's (1978) book *West African Traditional Religion.* Asare Opoku, an ethno-philosopher, believes the '*okra*',

> [i]n this role, … is a separate entity from the person and it may fail to guide and protect him; hence the expression *Ne kra apa n'akyi*, his soul (sic) or *okra* has failed to guide him (Asare Opoku 1978: 96)

The two issues about the '*okra*', 1) that it is not symbolic but quasi-physical and 2) that it can be conceived as a person's double or companion, illustrate that '*okra*' and 'soul' are simply two non-identical concepts (Wiredu 1987: 162), as 'soul' may be identical with 'mind' in English or not, depending on the context. Wiredu clearly rejects a spiritual conception of the '*okra',* and he insists that *'okra'* is quasi-physical in Akan thought (*ibid*.). Significantly, as discussed above, '*okra'* is a living entity, with the faculty of apprehension and feeling, hence it is categorically different from '*adwene*', which "is an individual's capacity for thinking and/or the outcome of the exercise of the capacity" (Wiredu 1987: 162). The interesting issue is the '*okra*' can be conceived as having '*adwene*' but one cannot talk of the '*adwene*' as the '*okra*'. In this context, it becomes folly to translate '*okra*' as 'soul' in Akan as would be done in English (*ibid*.).[175]

I will now discuss Gyekye's metaphysical take of what constitutes "the nature of a human being in Akan philosophy" (Gyekye 1995: 155), which makes up his dualism.

[175] This seems to address Majeed's (2013) critique of quasi-physicalism, arising from a contested translation or varying interpretive use of terms e.g. *okra*, *sunsum*, and so on.

5.2.3. Gyekye's reflection on Akan concept of person

Kwame Gyekye (1987)[176] published "An essay on African Philosophical thought: The Akan conceptual scheme", which offered another version of the nature of a human being – and thus of the mind and of personhood – as understood by the traditional Akan.

He begins by seeking to correct what he says are incorrect anthropological accounts that state that "the Akan people consider a human being to be constituted of three elements: *okra, sunsum,* and *honam* (*nipadua*: body) (Gyekye 1995: 155). Precisely, Gyekye's work brings out the dispute he had with Wiredu on the characterization of the Akan conception of a person, briefly referred to in the previous section. Kwame (1995) observes the dispute to be about "terms of physical and quasi-material entities" (Kwame 1995: 153) that constitute a human being.

According to Gyekye, the *okra* (soul) for the Akan constitutes the significant essence of the individual person, the living soul (Gyekye 1995: 155). Gyekye's interpretation of the Akan view is that the *okra* is spiritual. This interpretation arises from his belief that medicine men in the Akan culture are able to perceive, and have the capability of seeing and communicating with, the *okra* (*ibid*. 156). However, he cautions that the phenomena just described involving medicine men, "do not take place in the ordinary spatial world; […] this must mean that what those with special abilities see or communicate with is something nonspatial" (*ibid.*). This ties in with what he calls a crucial aspect of Akan metaphysics, that is, the "existence of the world of spirits (*asamando*), a world inhabited by the departed souls of the ancestors" (*ibid.*). This is significant because it explains the crucial departure from Wiredu (1987) who speaks of *okra* as a quasi-physical entity, "credited with para-physical properties" (Wiredu 1987: 162). Such a Wireduean interpreted view of the *okra* as quasi-physical would suggest

[176] In this thesis, for all the quotes on Kwame Gyekye's (1987) article I refer to a reprinted version published in *Readings in African Philosophy: An Akan collection* edited by Safro Kwame (1995), with the title "The concept of a person".

extinction of *okra* upon death of a person, which would mean "it would be senseless to talk of departed souls continuing to exist in the world of spirits (*asamando*)" (Gyekye 1995: 156), which is problematic since Akan metaphysics regards *asamando* (the world of spirits) as crucial as pointed out earlier.

Sunsum (spirit) is another entity that constitutes a person in Akan ontology, and Gyekye (1995) labels it spiritual. He also blames anthropological accounts for conceptual blunders that posits *sunsum* as material and as not identical to *okra* (soul) (Gyekye 1995: 159). The *sunsum* is the basis of personality and therefore immaterial, "the subject of psychical activity of dreaming" (*ibid*: 163). Arguing against Wiredu (1987), Gyekye states that "thought (*adwen*) as a function or act of consciousness, is in Akan philosophy an activity of the *sunsum*" (*ibid:* 157). It is notable, therefore, that for him *okra* and *sunsum* are related parts, "logically distinguishable entities" (Majeed 2014: 44) but "not *ontologically* distinct" (*author's emphasis* Gyekye 1995: 163). Polycarp Ikuenobe, in an Introduction to Gyekye's paper, explains as follows,

> They do not have separate existences held together by some external bond; they are not two entities that are related. Instead, the *sunsum* may be said to be a state of the *okra*: they are a unity in duality.
> (homepage.westmont.edu/hoeckley/readings/symposium/pdf/201_300/205.pdf)

Contrasted to the immaterial (spiritual) *okra* and *sunsum*, is the material component of the person, that which is physical (bodily), and that which disintegrates after death – this is what the Akan call the *honam* (body) (Gyekye 1995: 158;163-164), or what Wiredu translates as *nipadua* (body).

As stated earlier, Wiredu (2002) has pointed out that Gyekye thus has a "decidedly Cartesian understanding" (Wiredu 2002: 61) of the Akan concept of mind, a point that Celestine Chukwuemeka Mbaegu (2016) also brings out, when he concludes that Gyekye's

interpretation points to an Akan conception of person that is dualistic and not tripartite (Wiredu 1987: 161; Gyekye 1995: 155). In the article, "The mind body problem: the hermeneutics of African philosophy", Mbaegu (2016) explains:

> Gyekye is of the view that the proper representation of the Akan conception of a person is that he [sic.] is composed essentially of mind and body rather than the Akan tripartite view, namely soul, mind and body as the earlier anthropologists took it to be. He therefore confirms his new interpretation of the essential elements of a person when he observes that "*What happens to the soul (okra) takes effect or reflects on the condition of the body. Similarly, what happens to the body reflects on the condition of the soul"* (*author's* emphasis https://www.ajol.info/index.php/jrhr/article/view/141455).

This is yet another manifestation of how Gyekye (1995) opines his belief that for the Akan there is the physical and the non-physical only; a move away from Wiredu's quasi-physicalism. I will revisit this area of divergence when I discuss Wiredu's quasi-physicalism in the following section.

5.3. Discussing Wiredu's Quasi-physicalism

Now, Safro Kwame (2004) believes quasi-physicalism is a term that in his view best represents the traditional African philosophies of mind, rather than physicalism (Kwame 2004: 343). I agree with Kwame (2004) based on his clear interpretive summary of Wiredu's quasi-physicalism[177], where he states,

> The traditional Akan, as a quasi-physicalist, categorically asserts the existence of God, 'souls', and ghosts as quasi-physical entities. The modern or contemporary quasi-physicalist merely refuses to rule out the possibility of quasi-physical entities in the light of epistemic modesty and fallibilism. They, unlike their traditional counterparts, assert that if such beings or objects exist at all, it is instructive to consider them as quasi-physical objects on the following conditions: (1) we do not wish to multiply entities beyond necessity, and (2) we are already inclined toward physicalism. In other words, they admit that, for all we know, there may be God, 'souls', and ghosts who, for simplicity and other reasons, are best categorized as quasi-physical objects (Kwame 2004: 346).

[177] This interpretive view is also shared with Bernard Matolino (UKZN) in an email exchange with me (April – May 2019), who says "[…] I share that interpretation anyway. In my book *Personhood in African Philosophy*, I touch on those issues a bit".

Olusegun Steven Samuel (2011) has also surveyed the Akan conception of mind focusing on Wiredu's tripartite characterisation of the Akan constituents of personhood. Wiredu argues that the word "mind" which is a non-substance entity in the Akan thought does not go to constitute a person (Samuel 2011: 160). Recall, the Wireduean tripartite account has three major elements that are constitutive of a person, the '*nipadua'* (body), *'okra'* (life giving entity) and *'sunsum'* (that which gives a person's personality its force), added to that is '*mogya'* (blood, derived from one's mother) and '*ntoro'* (inherited from one's father and basis of patrilineal membership) (Wiredu 1987: 160-161). The most significant being '*okra*', described as:

> … [a] quasi-physical entity which has para-physical qualities. What this means is that the "*okra*" is neither physical nor spiritual, but both in quality. […] the mind, to Wiredu is not an entity or a substance (Samuel 2011: 161).

From the preceding discussion of the Akan conception of mind, the following question arises: Is Wiredu a dualist, idealist or a physicalist? No! These are Western views and do not fit into Akan categories of thought (Wiredu 1996: 99); Wiredu is quasi-physicalist[178]. Recall, as I have already intimated in Chapter two, dualism is now an unpopular concept in philosophy of mind[179], and moreover, mind is not a substance in this view, but a capacity or ability; and neither is the soul a substance, as it has quasi- or para-physical existence.

As intimated earlier, "Wiredu is very much against dualism" (Masolo 2010: 141). In Masolo's view, Wiredu's approach focuses solely on the nature of humans and sharply subverts the popularly believed African dualism (*ibid.*). Masolo comments thus;

[178] According to Majeed (2014) "Kwasi Wiredu argues that there is, at least, some other entity beside the material body […and so] he does not necessarily fit into our category of a dualist. A dualist is someone who, at least as is normally described of Plato and Descartes, postulates a spiritual component in addition to the bodily criterion of personal identity" (Majeed 2014: 56).
[179] Dualism, "[…] frustrates our intellectual thirst for unity by forever splitting the world into irreconcilable domains. It seems to make unintelligible the interaction we regularly experience in ourselves between thought and action, between events "out there" and the sensations or feelings arising "in us" (Cooney 2000: 2).

> Not only is the proposed African idea of self or the person different and interesting, it also subverts familiar notions in epistemology and metaphysics such as the nature of truth, mind, abstract ideas, God, spirit, life after death, and so on (2010: 141).

Oyowe also emphasises the same point as Masolo; "Wiredu strongly rejects the idea that mind refers to some *thing*, physical or non-physical, and with it all forms of dualism and mind-brain identity theories" (*author's italics* Oyowe 2015: 5). I think this stance surely must be uncontested, Wiredu is not dualistic.

In general, the articulated story of mind and body within the history of Western philosophy, from the period of the Socratics to the present day 'fails' the African story (Masolo 2010: 151), since it places the body as subpar and separate from the mind. Such misconceptions indicate the power of the historical Cartesian argument, a method anchored on two interrelated epistemic and ontological doctrines: as indicated in Chapter one, to recap;

1) *The primacy of the mental* (the epistemic doctrine): we can only be epistemically secure about our own minds and not about the physical world in general and our bodies or, indeed, the minds of others: it is our own mind which is best known and which really counts.
2) *The autonomy of the mental* (the metaphysical doctrine): there is no dependency between the mental and the physical: bodies can exist independently of minds and, perhaps more importantly …, minds can exist independently of bodies. The relationship between the two is external and contingent (Burwood *et al.* 1998: 5).

However, in Wiredu's interpretation of African thought emanating from the example of traditional Akan, these Cartesian categories would be misconceptions and they would not apply to the African scheme of thought. This is so as in general, African thought "sees nature primarily in its physical sense …" (Masolo 2010: 151). This clearly shows a distinction from Western metaphysics in terms of separation of categories – on one side, matter (physical) and on the other side, nonmaterial (mental) substances. In Wiredu's view, every substance is wholly made up of physical particles because everything *that is*, is thought of in physical terms, such as the capacity to occupy space (*author's italics* Masolo 2010: 152). As such,

> [T]he Cartesian idea of a nonphysical substance does not make much sense in the Akan mode of thought, because in the Akan scheme of things, the idea of a "spiritual substance," that is, a substance that does not occupy physical space, does not make much sense (*ibid.*).

Although for the Akan – and leading to a quasi-physicalist concept of mind –

> … it is plausible to believe, […] that the well-functioning brain is the material seat of the capacity that produces mental experiences […], these mental experiences are enabled by but are themselves not reducible to the physical functions of the brain (*ibid.*).

In the West, the way people talk about the body in relation to the mind points to a dualist approach in the sense that the body is viewed as that which must somehow submit to the mind. In the African tradition this kind of talk about the mind and the body seems more integrated, in fact the mind-body problem is not so much of an issue in terms of the Akan conception (Wiredu 1987: 163). Wiredu's opposition to dualism is explicit, "he rejects any attempt to bifurcate reality into irreducible mental and physical substances" (Masolo 2010: 149). Wiredu's perspective informed by the Akans, puts '*adwene*' back into the 'body', and

> [C]ontends that the physical world with its capacities is all there is as the primary basis of all nature; everything else either springs from physical reality as its mode of behaviour or is metaphorically imagined on the basis of similarities with or differences from the physical world (Masolo 2010: 141).

Since I have agreed that Wiredu's view is not dualism; should we then conclude that it is physicalism? (See e.g. Braddon-Mitchell and Jackson 1996: 4 for definitions of physicalism as also explained in Chapter two.) The physicalist view does not suit Wiredu. On the one hand, for the physicalist, Masolo, insists, "[...] for anything to exist it must occupy space or have the capacity to" (Masolo 2010: 152) occupy space, and such a perspective is not entirely against Wiredu's acceptance of nature as physical. However, on the other hand, and to reiterate the above, Wiredu's elucidation of the Akan concept of mind contends that 'mind', or '*adwene*' is not a constitutive element of personhood, (Masolo 2010: 152), but rather that

for the Akans, the mind has a nonsubstance characteristic (Wiredu 1987: 169); hence, for them the mind is a cognitive functional property.

Now, according to Wiredu (2002), "the Akan concept of mind has some affinities (though not an equivalence) with the contemporary, computer-inspired, theory of mind in Anglo-American philosophy called functionalism" (Wiredu 2002: 62). As outlined in Chapter two, machine-state functionalism does not conceive mind as a kind of entity, but rather mental states are characterised in terms of the causal roles they play. For Wiredu, functionalism,

1) "… views the mind as that pattern of inputs (stimuli), internal changes (modification of mental state), and output (behaviour, verbal or otherwise) that are displayed by the kinds of beings capable of such things as playing, planning, proving theorems, propounding fallacies, participating in conferences and so on" (*ibid*), and
2) "[…] it follows from the functionalist thesis that the question of the nature of mind is *categorically* distinct from that of the existence of spirit" (author's *emphasis ibid*.).

According to Wiredu (2002), his interpretation of the Akan concept of mind implies the same conceptual situation. In his view, "whether there are spirits or not, and if there are, whether they are intelligent or not, is not an issue on which functionalism has a necessary implication. Functionalism implies only that if there are spirits, and if they are capable of thinking, then they will have to exhibit the appropriate pattern of inputs, internal changes and outputs" (*ibid*.).

The soul in terms of '*okra*' however has an existence that is neither merely spiritual, nor purely physical, as explained earlier. As a result, Masolo understands Wiredu's understanding

of the nature of reality, as quasi-physicalist and neither as (reductive) physicalist, functionalist, or as substance dualist.[180]

In sum, Masolo opts for a minimalist approach – on this view let us call:

> … [Wiredu's] position [is] "moderate physicalism", because by attributing thought to a disposition or capacity characteristic of the specific type of brain humans have, [Wiredu's view] occupies a narrow but significantly unique space between dualism and hard materialism, thus escaping the rift that characterizes the history of the philosophy of mind in Western philosophy. The capacity to conceptualize in the manner characteristic of humans is part of the law-like response to stimulus that enables humans to achieve their specific difference from other organisms. Mind, on this account, Wiredu says, "is the function of thought" (Masolo 2010: 153- 154).

5.4. Conclusion

In this Chapter, I have discussed; 1) historical developments on the African conception of mind; 2) three specific African conceptions of the mind-body problem: firstly, Gbadegesin's Yoruba concept of mind; secondly, Wiredu's interpreted traditional Akan concept of the mind and lastly, Gyekye's interpretive reflection on Akan personhood; and lastly, 3) quasi-physicalism: quasi-physicalism as the approach within which Wiredu offers his interpretation of the Akan concept of mind. I specifically chose Wiredu's interpretation of the Akan conception of mind, not because it is the only way available to discuss subjective experience (SE) (qualia), but as I have already pointed there are other options: Igbo, Yoruba, Shona, and so on, but for my purpose in this thesis I settled on Wiredu's interpretation to take forward as it seems to have potential to add to the debate on the knowledge argument in a positive manner.

As my main aim, I have shown that Wiredu's interpretation of the Akan views, points to the mind as a cognitive faculty. I have shown how that is different from understanding the

[180] Noteworthy, Wiredu's analysis of the "Akan" conception of the person seeks to unravel epistemological issues that are apropos to the Western dualist conception of personhood.

Western substance dualist perspective. I have also simultaneously, explained how the Akan understand the soul as an entity with quasi-physical properties. I also discussed the main aspects that unite in the Akan concept of personhood (*okra*, *sunsum*, *nipadua* and *mogya*), and the reasoning for discussing these was only for clarification purposes, meant to clearly bring out Wiredu's interpretive philosophical take on *adwene*. In this part I have also discussed other African thinkers who either support or oppose the Akan views as interpreted by Wiredu or Gyekye.

In Chapter six, building on earlier arguments, on one end I place the West and on the other end the "African" perspectives; I propose a reconciling discussion that is centred on establishing a relating view between the ability hypothesis (viewing subjective experience as an ability, Nemirow and Lewis) and the notion of mind as a cognitive faculty (Wiredu's view). The idea is to combine Wiredu's view of the Akan concept of mind with that of Lewis, and, at the very least, in the process, to thus formulate a positive African statement of the ability reply – that is, turning the ability reply into a positive reply to Jackson's knowledge argument. The basis for the argument is that for Wiredu, as representative of the African metaphysical perspective, the mind is not taken as a substance distinct from the body, but rather as a cognitive ability. While, on the other hand, for Lewis, representing the Western epistemological view, an ability as 'knowledge how' is understood as subjective experience, which also affirms the existence of something more than what is physical, yet not necessarily affirm dualism. Note, I am observing all the disclaimers pointed out earlier on my use of metaphysical on the "African view" (Wiredu's Akan interpretation) as well as epistemological on the Western perspective.

This nuanced discussion seeks to determine if the African perspective offers something extra to what has already been outlined as positive (Western) replies to Jackson's knowledge

argument, given that the ability hypothesis was discussed in Chapter four as a negative response to Jackson. Recall, the ability hypothesis is generally about making clear the difference between ‘knowledge that’ and ‘knowledge how. I will assert that the ability reply, when shown to be in collaboratory conversation with the African perspective on the conception of the mind, allows a very strong positive reply to Jackson’s knowledge argument. As I will argue, the ability hypothesis holds potential to answer Jackson (1982) when amplified and consolidated with the Wireduean (1987) quasi-physicalist perspective which may as I will show be compatible with property dualism (see Chapters six). This is a move that goes beyond the political limitations that were set up and perpetuates knowledge categories as separate silos in terms of the West and Africa.

Chapter 6: The Novel Reply[181]

6.1. Introduction

The last Chapter was divided into two parts: first, an overview of the historical developments in mind-body problem in African philosophical thinking, and second, a discussion of three examples of African concepts of mind, by Gbadegesin, Wiredu and Gyekye. My overarching aim, as I have shown was that Wiredu interprets *adwene* (mind) as a cognitive faculty, something arising from the discussions of Akan personhood. As pointed out, by choosing Wiredu's Akan interpretation I am not implying that it is the only way African philosophy add to the debate on subjective experience (qualia). There are several other ways of debating subjective experience (SE), the Igbo and Yoruba, Shona, Nguni and so on. I have also shown how the Akan view, despite being close to Ryle, is different from understanding the Western substance dualist perspective. I have also simultaneously explained how the Akan, according to Wiredu (1987) understand the soul as an entity with quasi-physical properties. Lastly, I ended the Chapter by giving a clarificatory discussion of the main constituents of personhood in Akan.

In this Chapter, I seek to bring two philosophical paradigms together, that is, I position Nemirow (1990) and Lewis (1988) in two specific ways to argue my claim that their negative response to the knowledge problem, generally known as the ability hypothesis, can be transformed into a positive reply based on a specific reading of the ability reply. Nemirow and Lewis offer variant versions of the physicalist defence against Jackson's attack on

[181] Contemporary African philosophy of mind, within the tenets of African philosophy, can and should contribute to the global philosophical debate on equal terms as a speaking, living, vibrant unquestioned tradition, I argue. I agree with W.J. Ndaba (1999) in his article "The challenge of African Philosophy: A Reply to Mabogo More" who has argued "To effect dialogue between African and Western philosophy on the basis of mutual equality and recognition, we may conclude that contemporary African philosophers must debunk the notion of a 'traditional' African philosophy in its narrowly understood limited sense as a museum piece" (More 1999: 191), this forms part of the important issues that need redress in the acceptance of African philosophy, affirmed as part of the broader philosophy subject canon.

reductive physicalism (RP). In my view, specifically, Lewis's response (based on the *knowledge-that* and *knowledge-how* divide) to the knowledge argument is ideally suited to be reinvigorated to offer support to Jackson's property dualism. My argument benefits from the claims arising from within my two-pronged descriptions of the knowledge argument; that is describing the knowledge argument in terms of the epistemological and/or metaphysical aspects as outlined in Chapter three. Thus, in short, this Chapter advocates a facelift to the knowledge problem debate. Before we embark, let me first give some logical formulation of my argument which I will explain in more detail in the following sections.

I propose the following;

Epistemological argument,

1) Subjective experience (SE) is knowledge-how (KH) (Nemirow and Lewis)
2) Knowledge-how (KH) is knowledge (K) (Snowdon)
3) Therefore, subjective experience (SE) is knowledge (K).

Metaphysically directed argument,

1. a) Subjective experience (SE) is ability (imagine, recognise, remember) (Nemirow and Lewis)

   b) Ability is imagining, remembering and recognising (Nemirow and Lewis)

   c) Imagining, recognising, remembering is thinking (common sense)

   (*Interim conclusion*): Therefore, subjective experience (SE) is thinking.

2. a) Thinking is mental (mind) (Akan: *adwene* 'mind' and *dwen* 'to think')

   b) Mind is a function of thought and thought comes from the brain: having a brain is a pre-requisite for thinking/mind (Wiredu, quasi-physicalism)

   c) Therefore, subjective experience (SE), emerging from the brain as a cognitive function, is a mental property (from 2a and 2b and Interim conclusion in 1 above).

6.1.1. Epistemological Argument - Nemirow, Lewis, and Snowdon

On one side of interpreting the ability hypothesis is, what I will refer to as the Western view, with all the disclaimers mentioned in previous Chapters, which for my purpose here is taken as the "epistemological" argument and is summarised thus: *knowledge-how is knowledge*. When considering this view in this Chapter, I consolidate Nemirow (1990) and Lewis (1988) with Paul Snowdon's (2003) (Capacity Thesis-CT) challenge on Ryle's (1949) familiar know-that and know-how distinction[182]. I introduce Snowdon (2003) here as a link that will assist me in building my argument, which focuses on an aspect of his argument, which, in its turn, brings out the link between Wiredu (1987) and Nemirow and Lewis's arguments. As I develop my novel contribution, I limit my focus here on developing an argument for claiming why *subjective experience* (SE) is know-how, and, following Snowdon, why it is knowledge. On the other side (in the next section) is the African view (again with all disclaimers in previous Chapters), which for the purpose at hand is taken as the "metaphysical argument" using Wiredu's Akan perspective on mind, and is summarised thus: *mind is a function, the function of thinking*. On this side, I consider Nemirow and Lewis plus / (augmented by) Wiredu's quasi-physicalism. The context is that subjective experience (SE) as imagining, remembering and recognising is taken *as* ability by Nemirow and Lewis, but following Snowdon, an ability is knowledge, while Wiredu explains mind as a function of thought, which, following Nemirow and Lewis, means there is a link between mind and having the

[182] Cath, Y. (2019: 1) has pointed out that the distinction between two components of knowledge-how: the negative claim (*anti-intellectualism*) and the positive claim (*abilitism* or *dispositionalism*), which for a period of time was uncontested and taken as philosophical orthodoxy, is far from that straightforward facade. The scope of this discussion is something beyond what I aim to achieve so I take the distinction outlined in Chapter three as adequate for my purpose. I will not go into a detailed epistemology debate on the distinction.

ability for subjective experiences. I will expound these two views – the Western and the African[183] (Akan) – below.

To explicate, let me first go into some detail in terms of the epistemological directed argument. Hard-core physicalists, e.g. Nemirow and Lewis via their established ability hypothesis, have negatively adjudicated Frank Jackson's (1982) knowledge argument[184]. Their negative view summed thus, knowledge-how is only an ability (to remember, recognise and imagine). Such a negative take on the knowledge problem can be reviewed in different light if a specified interpretation of know-how is applied. I note a few examples to show that there is another way of reading the ability hypothesis (specifically on the know-how distinction). They are Paul Snowdon (2003), Yuri Cath (2019), and Joshua Habgood-Coote (2019) respectively. In my view they add another way of looking at know-how that can assist in integrating the ability hypothesis into a new format; making it amenable to a positive support of Jackson's (1982) property dualism.

Snowdon (2003) reacted to Ryle's established argument; the argument he expresses thus:

> [T]hat there are at least two types of knowledge (or to put it in slightly different way, two types of states ascribed by knowledge ascriptions) identified, on the one hand, as know (or state) which is expressed in the 'knowing that' construction (sometimes called, for fairly obvious reasons, 'practical' or 'factual' knowledge) and on the other, as the knowledge (or state) which is ascribed in the 'knowing how' construction (sometimes called 'practical' knowledge (Snowdon 2003: 1).

According to Snowdon (2003), of which I concur, the decades old argument (Ryle 1949) benefits from an unchallenged taking for granted of the distinction in epistemology between knowledge-how and knowledge-that. Snowdon captures Ryle view and characterises it in a general way into a view he calls "*the Standard View*" (*author's italics* Snowdon 2003: 2). I

[183] Please refer to Chapter four; introduction. What I refer to as African, does not seek to imply a homogenous view, rather I am specifically addressing the Akan as the representative view – and actually, Wiredu's interpretation of the Akan view – only.
[184] See Chapter four, the replies to Jackson's knowledge argument; specifically, on the "no propositional knowledge group".

think Snowdon is very modest to label his effort (the standard view) only a "useful stalking horse" (*ibid.*), in my view, his interpretation deserves more credit.

The standard view can be characterised as affirming two propositions. The first one is a negative thesis: "knowing how is disjoint from knowing that" (*ibid.*). Snowdon labels this Ryle's Disjointness Thesis (DT),

> Knowing how does not consist in knowing that some proposition is true or that some fact obtains; knowing how cannot be reduced to or equated with (any form of) knowledge that (*ibid.*).

The second proposition is what Snowdon (2003) gives as Ryle's positive thesis: knowing how is "practical" knowledge". Snowdon has labelled it Capacity Thesis (CT),

> Knowing how to G does in fact consist in being able to G, in having the capacity to G. Knowing how ascriptions ascribe abilities or capacities to do the mentioned action (*ibid.*).

Cath (2019) has weighed in with another approach that acknowledges, but shifts from the traditional Rylean argument; "accounting for the relationship between knowledge-how and action" (Cath 2019: 9). The shift is to understand the intelligence of knowledge-how without appealing to knowledge (Cath 2019: 6). For Cath there are grounds for an argument that says "knowledge-how has a different *epistemic profile* from knowledge-that" (*ibid.*), which allows a window for viewing know-how not just in terms of a capacity. And, Habgood-Coote (2019) has also sought to illuminate Ryle's traditional knowledge-how distinction. His "compromise position" seeks to synchronize claims about knowledge-how "as a kind of propositional knowledge" (Habgood-Coote 2019: 86) and knowledge-how taken "to be a kind of ability" (*ibid.*). I will come back below to give more details on the views I have just introduced.

In my view, though Cath and Habgood-Coote offer epistemological arguments that are variants, most importantly is that both have related aspects that endorse Snowdon's position.

As such I will focus on Snowdon's CT as representative voice of the argument against the standard view by claiming that knowledge-how is knowledge. The purpose of focusing on CT is to show that knowledge-how is knowledge and not only limited to ability or capacity. This will become clearer when I apply Snowdon's CT discussion to Nemirow and Lewis's negative ability hypothesis; transforming it to show that subjective experience (SE) is knowledge-how, and thus knowledge, contrary to Nemirow and Lewis. Due to my current scope of argument I will reserve a discussion of the DT for another occasion.

Nemirow and Lewis phrase the ability reply in a way that implies there is no new knowledge gained when Mary leaves the room; in the sense that subjective experience[185], as knowledge-how, is not viewed as new knowledge (subjective experience (SE) as something nonphysical that comes out of the physical), which implies that they are not property dualists. Property dualists exemplify non-reductive physicalism (NRP) with Jackson as a prime example. As a non-reductive physicalist, Jackson would insist that mental properties are something over and above physical properties. But, on the contrary, Nemirow and Lewis, as examples of hard-core physicalists, do not allow that mental properties are different in kind from physical properties, and view the former as ontologically reducible to the latter. Hence, they are against Jackson's property dualism and they are in defence of reductive physicalism (RP)[186]. I hold that they offer a fairly successful view when they argue against phenomenal knowledge; that is, they are not in support of subjective experience (SE) as new facts or as anything of a propositional kind.

However, I would like to reassess their contributions by reconsidering their ability hypothesis; I seek to place it as a *positive* defence of non-reductive physicalism (NRP). In that case what could be done with Nemirow and Lewis, I ask? The problematic issue is that

[185] To be very clear, what-it-is-like, phenomenal experience, and subjective experience mean the same and is a form of know-how.
[186] See 2.1. Reductive physicalism (RP) and non-reductive physicalism (NRP).

they see phenomenal experience as an ability *only* and they equate knowledge-how with an ability.

Going back to A J Ayer (1956) who states,

> For someone to think that he knows something when he really does not know it, it is not enough, […], that he should be mistaken about the character of his mental state: for if his mental state were what he took it to be, that is a state of knowledge, he could not be mistaken about the fact which it revealed to him. If this view were correct, then being in a mental state of this kind would be a sufficient condition for having knowledge. And if, in addition, one could not know anything to be true without being in this state, it would be both necessary and sufficient (Ayer 1956: 15).

The above view can be summarised as follows; being in a certain cognitive state is being in a mental state, and being in that state is a sufficient state of knowledge. Ayer (1956) objects to that by seeking a closer consideration of what the nature of possession of knowledge amounts to. According to him, does possession of knowledge only mean showing a performance that confirms possession of such knowledge? Either to 1) oneself as the one possessing the knowledge or 2) as displayed to others? For example, if we take historical facts; I know some facts of history, but those facts are not available to me only "on rare occasions when I call them to mind. I know them at this moment even though I am not thinking of them" (*ibid.*). Let us consider the following example; I could not be thinking about the day Pope John Paul II died (April 2, 2005) right now but I know that date, despite me not actively musing about it presently. What Ayer (1956) argue for is that once I think harder about it, I can remember the correct date. Which suggests that there can be aspects of knowledge we can identify as knowledge not only because one is presently exercising it. The point is,

> [t]he verb 'to know' is used to signify a disposition or, as Ryle puts it, that it is a 'capacity', verb. To have the knowledge is to have the power to give a successful performance, not actually to be giving one (*ibid.*).

Such a view with its roots in Ryle's famous positive thesis: that to know is a capacity, has received good mileage in the literature, but Snowdon's (2003) *The Presidential Address*:

"Knowing how and Knowing that: A distinction reconsidered" would change the course of the major Rylean inspired epistemological debates. The Capacity Thesis (CT) that had been accepted and read in a particular way was given to a different guise. The Capacity Thesis (CT) outlines is as follows; to reiterate,

> Knowing how to G does in fact consist in being able to G, in having the capacity to G. Knowing how ascriptions ascribe abilities or capacities to do the mentioned action (Snowdon 2003: 2).

Snowdon warned that "when know how, as it is often is, is described as 'practical' knowledge" (*ibid*.), it would suggest a somewhat dangerous way to express the CT claim since:

> 'Practical' applies unproblematically to knowing how in that the content of such knowledge relates, at least usually, to *practice*. Thus, knowing how to G concerns the practice of G-ing, just as knowing the date of the Battle of Hastings concerns mediaeval history. It is quite clear, though, that from this obvious sense in which knowing how is practical that it does not follow that it is practical in the sense affirmed by CT. It does not follow that the presence of knowing how consists in the presence of a *practical capacity* (*author's italics ibid.*).

That challenge to the way of expressing the CT by Snowdon breached the gauntlet on what had become considered as the accepted way or what had for years "remained part of conventional wisdom in philosophy since he put it forward" (Snowdon 2003: 1). The challenge thereby precipitated an alternative understanding of interpreting CT away from the standard account.

Now let me try to explain my interest in the CT. For brevity the CT is expressed as follows: "S knows how to G if and only if S can, or is able, to G" (Snowdon 2003: 8). A capacity (or ability) as we are aware within the Western view is taken as knowledge-how (practical knowledge). However, this "familiar approach" (Snowdon 2003: 2) for the Western context is turned on its head by Snowdon's discussion of the CT. Significantly, it is the interpretation of the CT: implying that knowledge-how is just a capacity that concerns Snowdon (2003); he

labels it a dangerous interpretation. Therefore, Snowdon warns against it: his discussion aims to show that there is another applicable interpretation of the CT that points to a reading that argues for an alternative suggestion that seeks to affirm that knowledge-how is not only capacity. Snowdon's (2003) analysis of the CT positions an interpretation of knowing-how that challenges the view of CT as ordinarily affirming "that the presence of knowing how consists in the presence of a *practical capacity*" (*ibid*.). Such a reading is core for my thesis, I argue in support of such a challenge, since I also think that there is compelling evidence to be advanced to motivate for a slight shift away from the standard view, only affirming CT, knowing how an ability is and I discuss the view below.

Let's look closer at the view that a capacity (practical knowledge) is not only knowledge-how as exemplified by the example given below. Snowdon (2003) has proposed five counterexamples that seek to show that the "possession of the capacity (or ability) to G is not a necessary condition for knowing how to G" (Snowdon 2003: 8). I will only give one here, since all the five counterexamples apply *mutatis mutandis*,

> I know how to make Christmas pudding, and have done so frequently. Alas, a terrible explosion obliterates the world's supply of sugar, so that no one is able to make it. I still know how to but, like everyone else, cannot (*ibid*.).

This counterexample in my view does not offer a clear-cut view on how knowledge-how is knowledge, but it does at least not imply that knowledge-how consists of a practical ability *only*. I think – having the ability to bake a cake, implies that one has propositional knowledge and not just an ability, as even if one does not have the ability anymore, one does know what it means to bake a cake. Another example, imagine an artisan who gets unlucky in a horror traffic accident and both hands are amputated, the artisan retains the knowledge of his trade, and only loses the capacity to apply the knowledge. The point I am illustrating is to say that knowledge is not *only* based on the subject being able to show, teach, or tell (or otherwise

convey) us how to do something – Ayer's point above. There is no assumption that the knowledge to be acknowledged at present "entails that it can be passed on by the knower […]" (Snowdon 2003: 9). The critical point to hold on to is that the CT in arguing against knowledge-how as a capacity (only), points to what we are attempting to affirm: that the ability hypothesis is actually a positive reply favourable to Jackson.

Another example of this line of thinking is given by Cath (2019) in "Knowing how", a paper that outlines his overview of the knowledge-how debates. In the paper he has suggested another approach to knowledge-how, shifting from "a largely unquestioned feature of philosophical orthodoxy" (Cath 2019: 1), steeped in Ryle's (1949) legacy. Cath's approach when he argues that "knowledge-how has a different *epistemic profile* from knowledge-that" (Cath 2019: 9) affirmed that Ryle's positive claim could be contested. His counter argument is that there is a crucial connection that we need to accept, but to keep separate, if we are to understand the exact nature of knowledge-how. Cath (2019) alludes to difficult connections that exist when interpreting know-how claims as only performance. The idea is that "knowledge-how is a precondition of certain actions or abilities" (Cath 2019: 2). In developing the argument, he states:

> […] *if* intellectualism is true then for any necessary condition for possessing knowledge-that there will be a parallel necessary condition for possessing knowledge-how (Cath 2019: 9).

He exemplifies by considering three following claims:

1) If S knows that p then S has a true and non-Gettierized belief that p
2) If S knows that p then S is justified in believing that p
3) If S knows that p then S believes that p (*ibid.*).

I agree with him that the schemas stated by (1) – (3) are accepted as capturing necessary conditions for possessing knowledge-that. Now suppose that intellectualism is true. For Cath

(2019) in particular, "a version of intellectualism where if S knows how to Φ then, for some way *w*, S knows that *w* is a way for S to Φ" (*ibid.*). If this view were true, and if (1) – (3) are all true, then the following must also state necessary conditions for possessing knowledge-how:

1) If S knows how to Φ then, for some way *w*, S has a true and non-Gettierized belief that *w* is a way for S to Φ.
2) If S knows how to Φ then, for some way *w*, S is justified in believing that *w* is a way for S to Φ.
3) If S knows how to Φ then, for some way *w*, S believes that *w* is a way for S to Φ. (*ibid*.).

Joshua Habgood-Coote (2019) in his paper "Knowledge-how, Abilities, and Questions" has also expressed what he calls the *interrogative capacity view*: "knowledge how to do something is a certain kind of ability to generate answers to the question of how to do it" (Habgood-Coote 2019: 86). The interrogative capacity view he explores as a compromise position, argues that more could potentially be added to the knowledge how debate (*ibid*.). He says,

> […] combining a propositional object with an abilitative relation makes the view uniquely well-placed to defuse the tension between semantic theory and the practicality of knowledge-how, and allows it to illuminate the relation between knowledge-how, propositional knowledge, and abilities (Habgood-Coote 2019: 88).

Habgood-Coote (2019) argues that "knowledge-how is not identical with *just* any ability to answer a how-to question" (*my emphasis ibid.*). The account of the *Interrogative Capacity View* he puts across is thus,

> For any context c, subject S, and activity V, an utterance of 'S knows how to V' (in its practical-knowledge ascribing sense) is true in c iff c has associated with it a set of practically relevant situations $\{F_1, F_2, \ldots\}$, and, for all (or at least most) F_i that are members of $\{F_1, F_2, \ldots\}$, S has the capacity to activate knowledge of a fine-grained answer to the question, how to V in F_i?, in the process of V-ing (Habgood-Coote 2019: 92).

Explained; in knowing how to solve a mathematics problem (7+5) or knowing how to dress fashionably: (at a graduation ceremony, baby christening, and so on – one needs to be able to meet the situation). Habgood-Coote (2019) posits these as interesting examples which according to him are cases that might:

> Typically involve (i) generating new knowledge to meet the situation, (ii) a fine-grained question with many different answers, (iii) an ascription made relative to a wide range of situations, (iv) and an intertwined process of learning and of doing (*ibid.*).

I think Habgood-Coote to his credit has made an important point that I agree with, knowledge how is "not a distinctively practical kind of knowledge" (Habgood-Coote 2019: 93) only; instead in a simplified way, knowledge-how is knowledge. That suggest that being able to perform (ability) entails already the possession of certain other forms of knowledge-that. The position is similar to what Snowdon (2003) put across as the positive CT, which also forms part of his analysis to re-evaluate the danger as arising from such an interpretation, that limits knowing-how to capacity only.

So, now, recall that Nemirow plus Lewis imply that knowing-what-it-is-like is the ability to place oneself in a state representative of an experience. That implies understanding an experience means that one can remember, recognise and imagine the experience (Lewis 1988: 18) which equates for Lewis and Nemirow to knowing-how. This understanding of an experience implies, in its turn, now following Snowdon (2003), that because you know how to experience, you have knowledge (of the experience) because, following Nemirow and Lewis, you are thinking. If we consider the experiencing of red by Mary we can say she has the knowledge of what-it-is-like (subjective experience) to see the red fire truck, and that means she is able to see red. The know-how as knowledge comes before – or, if we push Snowdon's argument, independently of – the ability: ability as remembering, imagining, and

recognizing our subjective experience (SE) for the experience it is, according to Nemirow and Lewis.

6.1.2. The Metaphysical argument - Nemirow, Lewis and Wiredu

Let us know turn to the second, metaphysical, argument that considers the African perspective of the mind – the view that the mind does not exist in the body, rather it is simply a cognitive capacity (Wiredu 1996: 16) and this view is thus a "nonsubstance conception of mind" (Wiredu 1987: 160). Mind is a *function* viz., the function of thinking, not the source of thought. The human mind is "conceived as the functional *capacity* of the brain" (*author's italics* Masolo 2010: 244). I think the ability reply may be fortified so as to become a positive reply to Jackson, if it is brought into Wiredu's quasi-physicalist perspective. My argument is that the ability hypothesis as the view that claims that Mary does not really acquire new knowledge but only an ability, actually DOES relate to the concept of subjective experience (SE) as a mental property not an ability. I see non-reductive promise in the ability reply, if I interpret it and expand it via the interpreted Akan concept of mind, which portrays or understands mind as a cognitive faculty. (Recall this is also the reason for referring to Wiredu's account of the mind as quasi-physicalist, as argued for in the previous Chapter.) In this way, I endeavour to change the negative ability reply to become a positive support of Jackson's property dualism.

Important to note that arguing that the mind is a cognitive faculty may also seem to be in support of reductive physicalism (RP) as per identity theorists. Identity theorists state that mental states are identical to neurophysiological states. The point I stress is that mind for the Akan is viewed as a cognitive faculty, and, as such it is also not reducible to the physical, as for the Akan it emerges from the physical (Wiredu 1987: 161). Significantly, I argue that Wiredu's quasi-physicalism offers a non-reductive perspective of the mind: the view that the

mind is a cognitive faculty and not a materially existing entity or substance, but indeed is also not reducible to the body.

Such a quasi-physicalist perspective (an Akan-inspired one) points us in the direction of affirming subjective experience (SE) debates. Phenomenal experience allows a context for a positive response to Jackson' knowledge argument against reductive physicalism (RP), specifically, in defence of some form of dualism: property dualism, as pointed out earlier. Recall, Jackson (1982, 1986) is arguing that there are some non-physical properties that escape the reductive physicalist story: reducing the mental to the physical – what type identity theorists[187] affirm – "that every mental state is identical with some state in the brain" (Braddon-Mitchell and Jackson 1996: 91). For Jackson, to recap,

> […] the material or physical story about us is not the complete story about us, because it leaves out the sensory part, the 'redness of reds' part (Braddon-Mitchell and Jackson 1996: 127).

A point that those in the non-reductive physicalist camp affirms, and I do not disagree with. In general, Jackson's original position means the phenomenal side (the mental) of psychology, e.g. sensation of red colour experiences, the sound of D minor guitar key, the savoury flavour of dumplings, and so on, is left out (*ibid.* 128). While not being reductive physicalist about it; my view is to argue for a non-reductive view (token-identity theory), thus if I am not successful it implies that subjective experience (SE) is an ability and that Nemirow and Lewis refute Jackson.

So, potential affirmation of ability theorists as positive support for Jackson, has to be based on something more than the 'Western' version of the ability reply, as we need an

[187] Recall, Smart's (1959) identity thesis, given as a "contingent statement, […] A is identical to B […]" (Smart in Robinson 1998: 190). Such a statement suggests that all the properties of either A or B are in common. Rosenthal (1991) has expressed it as follows, "[…] every mental state, such as a sensation of red, is also a physical state. Since states count as mental or physical in virtue of having properties that are mental or physical, mental states have both mental and physical properties" (Rosenthal 1991: 162).

epistemological and a metaphysical refutation of the ability reply (see Chapter three again). In my view, as stated, Wiredu's (1987) quasi-physicalism is a form of property dualism: in terms of the interpreted Akan concept of mind, that is, mind as cognitive faculty irreducible to the physical, and thus allows the possibility of subjective experience (SE), but not in the reductive physicalist manner (mind is what the brain does), but rather in the property dualist manner that views subjective experience (SE) as a mental property.

The challenge is therefore to situate Wiredu's (1987) interpreted Akan view that is quasi-physicalist as a positive reply to the knowledge argument when *merged*[188] with the negative ability hypothesis as presented by Nemirow (1980, 1990) and Lewis (1983, 1988), as pointed out earlier. To repeat, on the one hand, the ability reply as directed to Jackson's non-reductive physicalism (NRP) is about having knowledge-how, an ability; whilst on the other hand, according to Wiredu (1987), the mind is understood as a cognitive faculty which can also be shown to be knowledge-how, in other words an ability. What I refer to as knowledge-how, I take to be non-reducible subjective experience (SE), what-it-is-like-to, or phenomenal experience, following Nemirow and Lewis. And then I argue that knowing-how in the sense of what-it-is-like-to is new knowledge, following Snowdon (2003). It that way, Jackson is defended epistemologically. To clarify the context of the metaphysical defence: subjective experience (SE) is thinking, following Nemirow (1990) and Lewis (1988), BUT by appealing to Wiredu (1987) we see thinking is a mental event (mind is a function of thought), and so subjective experience (SE) is a mental event. Thus, subjective experience (SE) as a mental event or property (metaphysical argument), is an ability that is equivalent to knowledge (epistemological argument).

[188] The idea of a merger is about offering an argument that shows that both sides – *as people* – can augment each other, on the basis of mutual equality and recognition, in the quest to solve a philosophical issue that has been portrayed as mainly a Western philosophical issue, while it has always been considered in African thought as well.

6.2. A Synthesis: the epistemological and metaphysical arguments

Jackson's knowledge argument is an argument against reductive physicalism (RP), that is, it is a doctrine that asserts the view that everything that exists is *not* the sum of its physical properties only. As argued earlier, the ability reply forms an integral part of the replies to Jackson's knowledge problem especially since the negative ability reply to it (Nemirow and Lewis), claims there is no new propositional knowledge that Mary adds, only that she achieves "possession of certain abilities" (Braddon-Mitchell and Jackson 2007: 138). The abilities referred to here are that she can imagine sensing red, and is able to recognize red simply by looking at a red object presented in daylight (*ibid.*). In addressing such a reply to Jackson's anti-physicalist stance, I posed a challenge that aimed at refining the "negative ability hypothesis" by, 1) benefitting from the CT to show that subjective experience (SE) is knowledge, and 2) that subjective experience (SE) is mental (as it is the cognitive faculty of thinking and mind is a function of thought).

To consolidate my argument, I will present my argument in the premise-conclusion form below. Let me first briefly explain, as already noted, my argument benefits from a double-pronged description; one is an epistemological argument and the other is a metaphysical argument, (with disclaimers for both arguments).

The epistemological argument takes together Nemirow and Lewis with Snowdon to show that subjective experience (SE) is knowledge. My approach showed that knowing-how is knowledge, based on the assumption that *subjective experience (SE) is knowledge-how*. The assumption rests on the reassessment of (Nemirow and Lewis) by applying Snowdon's ground-breaking challenge to Ryle's capacity thesis (CT). I then concluded, based on the two assumptions, noted above, that knowledge-how is knowledge. And, that lead to the conclusion that subjective experience (SE) is knowledge.

The metaphysical argument appealed to Wiredu's Akan quasi-physicalist view to show that subjective experience (SE) is a mental property, emerging from the physical brain *amene*. Therefore, my defence of Jackson's knowledge argument is based on showing that subjective experience (SE) is an emergent property which contributes new knowledge, which validates his property dualism. I therefore conclude that Jackson's property dualism is defendable, and as such leading to the conclusion that the knowledge argument can be justified.

My argument in premise-conclusion form, then, is as follows:

If the knowledge argument is sound, then subjective experience is knowledge (assumption for epistemological argument):

1. Subjective experience (SE) is knowledge-how (assumption plus Nemirow and Lewis)
2. Knowledge-how is knowledge (assumption plus Snowdon)
3. Thus, the knowledge argument is sound (1,2)
4. Therefore, subjective experience (SE) is knowledge (1,2, 3)

If quasi-physicalism is true, then subjective experience (SE) is an emergent mental property and property dualism is true (assumption for metaphysical argument):

1. Subjective experience (SE) is an ability (e.g. thinking) (Nemirow and Lewis)
2. Thinking (as a cognitive ability) is an emergent property (common sense plus Wiredu)
3. Thus, quasi-physicalism is true (1,2)
4. Therefore, subjective experience is an emergent mental property and property dualism is true (1,2, 3)

If subjective experience (SE) is knowledge and property dualism is true (assumption for synthesis), then the knowledge argument is validated:

1. Property dualism is true (metaphysical argument)

2. Subjective experience (SE) is knowledge (epistemological argument)
3. The ability reply validates the knowledge argument (synthesis) (1,2).

6.3. Conclusion

Indeed, as I wrap up this chapter, I looked at the epistemological as well as metaphysical facets of arguments to consolidate what has been offered by hardcore physicalists. The first part of the section, on the "epistemological" side (with disclaimers), was a consolidation of Nemirow and Lewis with Paul Snowdon's (2003) (Capacity Thesis-CT) challenge on Ryle's (1949) familiar know-that and know-how distinction. I limited my focus here on developing an argument for claiming why *subjective experience* (SE) is knowledge-how, and, following Snowdon (2003), why it is knowledge. On the other side is the African view (again with all disclaimers I have maintained earlier Chapters), which for the purpose at hand is taken as exclusively "metaphysical" using Wiredu's Akan perspective on mind, and is summarised thus: *mind is a function, the function of thinking*.

On the epistemological side, the context is that subjective experience (SE) as imagining, remembering and recognising is taken *as* ability by Nemirow (1990) and Lewis (1988); but following Snowdon (2003), an ability is knowledge. On the metaphysical side, Wiredu (1987) explains mind as a function of thought, which, following Nemirow and Lewis, means there is a link between mind and having the ability for subjective experiences. I thus conclude: subjective experience (SE) or qualia (diverse mental states e.g. hearing D minor; seeing red; feeling pain, and so on), understood as a cognitive faculty of the mind, which emerges from the physical brain, adds 'real' knowledge to a person's existing knowledge. What I am saying, therefore, is that subjective experience as *a cognitive faculty of the mind*, emerging from the brain (the physical), adds substantive knowledge to a person's physically

inspired knowledge base, because subjective experience (SE) as knowledge-how is knowledge too.

Chapter 7: Conclusion

This is a thesis which applies African philosophy of mind to Western philosophy of mind in order to enrich the latter with the purpose of demonstrating the value of bringing different traditions into conversation. In the thesis, I demonstrated that although the unsolved mind-body problem is presented as an ongoing philosophical issue in Western philosophy, a turn to an African perspective can shine new light on the problem. I did this by formulating a novel alternative reply to Frank Jackson's knowledge argument, namely: subjective experience (SE) taken as a cognitive faculty of the mind, coming out of the physical brain adds genuine knowledge to a person's existing knowledge.

In Chapter one of this thesis, I deliberately began by describing the mind-body problem as outlined by René Descartes in the seventeenth century, that is, I explored the foundational Cartesian methodical doubt; as outlined currently in contemporary philosophy of mind which credits Descartes as having presented the most explicit form of dualism; distinct substances (mental and physical).

In Chapter two, I considered the most familiar solutions to the mind-body problem in terms of conceptual categories: the Cartesian (dualist camp), the orthodoxy physicalist and the functionalist and idealist (monistic camps). These camps are responses to the mind-body problem; I limited my discussion to only substance and property dualism, then I introduced reductive physicalism (RP) and non-reductive physicalism (NRP). I then briefly introduced Jackson's property dualism as an example of non-reductive physicalism (NRP). Before rounding off, I discussed three varieties of functionalism emphasising machine-state functionalism. Lastly, I introduced two specific anti-physicalists arguments, the knowledge and the conceivability arguments.

In Chapter three, I discussed the knowledge argument (briefly introduced at the end of Chapter two). I focused solely on the knowledge argument, described in terms of metaphysical and/or epistemological descriptions. I highlighted the two descriptions since both as approaches (metaphysical and/or epistemological) offer avenues of solving the nagging mind-body problem. In the second section of this Chapter, I firstly outlined four metaphysical problems in philosophy of mind, relating to consciousness. Next, I gave a historical survey of the "*knowledge intuition*", focusing mainly on the three precursors to Jackson's knowledge argument; C.D. Broad (1925), Herbert Feigl (1958), and Thomas Nagel (1974) in that order. And, lastly, I explained Jackson's (1982; 1986) version of the knowledge argument: outlined as the, 1) the case of Fred, and 2) the case of Mary.

In Chapter four, I looked at two main parts; replies to Jackson's (1982; 1986) knowledge argument, as well as, 2) the counter-objections to the replies. I showed that the two strands of replies have remained unsatisfactory responses.

In Chapter five, I presented a discussion of the mind-body problem in African philosophical thinking. I discussed three concepts the mind: 1) the Yoruba concept of person; 2) Wiredu's Akan interpreted view (quasi-physicalism); and Gyekye's Akan interpreted view (dualism). I focussed on Wiredu's quasi-physicalism which depicts the mind as a cognitive faculty. I gave a disclaimer on why, specifically, I opt for Wiredu's (1987) interpretation of the Akan conception of mind, instead of other options like; Igbo, Yoruba, Shona, Nguni, and so on. In opting for the Akan interpreted conception of mind I take it as a custom-fit view for my thesis because of the positive potential it adds to the debate on the knowledge argument, specifically on the nature of subjective experience (SE).

In my last Chapter, I (re)looked Jackson's knowledge argument against reductive physicalism (RP). I argued to show that the "negative ability reply" forms an integral part of replies to

Jackson's knowledge problem. In addressing the negative ability reply to Jackson's anti-physicalist stance, I posed a challenge that was motivated by a specific challenge to the established standard Capacity Thesis (CT); showing first that subjective experience (SE) is knowledge, and, second, that subjective experience (SE) is mental (as it is the cognitive faculty of thinking and mind is a function of thought).

My novel argument benefitted from the two facets: the epistemological, as well as, the metaphysical. These arguments consolidate positively what has been offered negatively by hardcore physicalists. For the first part, the "epistemological" (observing disclaimers), I consolidated Nemirow (1980; 1990) and Lewis's (1983; 1988) negative ability reply to Jackson (1982; 1986) and revised it by Snowdon's (2003) challenge of Ryle's (1949) standard thesis – Capacity Thesis (CT). I limited my focus on developing an argument that claims why *subjective experience* (SE) is knowledge-how, and, following Snowdon (2003), why knowledge-how is knowledge, thus concluding that subjective experience is knowledge. The second part of my argument is the African "metaphysical" view (again with all disclaimers I have maintained in earlier Chapters). Here, I considered Nemirow and Lewis's negative reply to Jackson, revised by Wiredu's quasi-physicalism based on the view of *mind as a function, the function of thinking*. The final conclusion is that epistemologically, subjective experience (SE) as imagining, remembering and recognising is taken *as* ability by Nemirow (1990) and Lewis (1988); but following Snowdon (2003), an ability is knowledge, while, on the metaphysical side, Wiredu (1987) explains mind as a function of thought, which, again following Nemirow and Lewis, means there is a link between mind and having the ability for subjective experiences (SE), in other words, subjective experience is an emergent mental property, which validates property dualism.

This brought me to the formulation of my own novel alternative reply to Jackson's knowledge argument. My reply is that subjective experience (SE)/what-its-likeness understood as an emergent mental property, emerging from the physical brain, adds 'real' knowledge to a person's existing knowledge. The implications of this reply are at least; to revive the knowledge problem debate even given Jackson (1998) recent change of heart. In 1998, after over a decade of defending his anti-physicalist conclusion for the knowledge argument; Jackson recanted, he sees "the error of [his]… old ways" (Jackson 1998 in Stoljar, Ludlow and Nagasawa 2004: 439), as he now rejects the claim that Mary learns new propositional knowledge outside of the monochromatic room[189]. In other words, Jackson (2004) now "embrace[s] some version or other" (Jackson 2004: *xvi*) of reductive physicalism (RP) and dismisses as inadequate the conclusion of his knowledge argument. Revitalizing the debate with an African view is an important contribution to philosophy of mind which has been dominated by Western views. Significantly, despite Jackson (1998) having abjured, the argument still remains important for enriching and informing mind-body debates centred on the nature of qualia; and also, as a contribution in effecting a conversation between African and Western philosophy focussed on a common *human* problem, the mind-body problem and its implications for a human concept of mind, for which Africa has to contribute. Contemporary African philosophy of mind, in my view, offers plausibly an avenue that amplifies the connection of Western and African thought.

In this thesis, though I have opted to focus on Wiredu's interpretation of the Akan concept of the mind, specifically, because of his take on subjective experience (SE): mind as a cognitive function. Resonating with that is a similar Western epistemological perspective, which offers a reading of subjective experience (SE) as knowledge-how. Which entails that incorporating

[189] In two articles; "Mind and Illusion", and "Postscript on Qualia", explains why Jackson now disavows the knowledge argument. Jackson states, "I now think that the puzzle posed by the knowledge argument is to explain why we have such a strong intuition that Mary learns something about how things are that outruns what can [be] deduced from the physical account of how things are" (Jackson 2004: 419).

what is offered from a metaphysical (African) and the epistemological (Western), allows an enriched understanding of the mind-body problem. Again, applying all disclaimers mention, earlier; I am not saying African is only "metaphysical" or am I implying that the West is only "epistemological". The point I am showing is that there is potential arising from both sides, so that they implode to the benefit of philosophy of mind.

Let me emphasise, by focussing only on Wiredu's interpretation of Akan conception of mind, I never intended to undermine other conceptions of mind, nor am I envisaging that this novel alternative approach that I propose is the only way of attending/ approaching this debate. As noted by Masolo, even Wiredu urged that,

> […] it would be interesting to compare […] views with analyses of various other African conceptions of the person to determine whether various categories implied in such conceptions indicate or refer to body, mind, and possible other elements as separate substances or only as capacities produced by the organically specific type of the (human) body (Masolo 2010: 168-169).

One only has to investigate the growing body of literature that shows that there are several African conceptions of personhood, even though "it is still the case that certain attributes are common in African cultures" (Oyeshile 2002: 104-105), we still cannot generalise. I exemplify by the following philosophers from different traditions e.g., Mongane W. Serote on the Bantu: In the context of South Africa, that means: Basotho, Bapedi, Batswana, AmaZulu, AmaXhosa, AmaNdebele, AmaSwati, VhaVenda and VhaTsonga[190] (Serote 2016: 33); Segun Gbadegesin who discuss the Yoruba[191]; Safro Kwame on the Akan[192]; Jonathan O. Chimanakom[193] on the Igbo; Olatunji A. Oyeshile on the Yoruba, Akan and Igbo[194];

[190] "Reflections on "the RDP of the Soul"". *The Thinker.* Vol. 69 (2016): pp. 32-37. Professor Mongane "Wally" Serote is Honorary Professor at University of Johannesburg philosophy department and currently the Chief Executive of Freedom Park Trust, Pretoria.
[191] African Philosophy: Traditional *Yoruba* Philosophy and Contemporary African Realities by Segun Gbadegesin (1991).
[192] Kwame, S. (2004). "Quasi-Materialism: A Contemporary African Philosophy of Mind". *A Companion to African Philosophy*. K. Wiredu (Ed.) (2004). Blackwell Publishing Ltd.
[193] *Atuolu Omalu: Some Unanswered Questions in Contemporary African Philosophy.* J. Chimanakom (Ed.) (2014).

Pascal Mungwini on the Shona[195]; Ephraim T. Gwaravanda on Shona proverbs[196]; and others. These might not all be working on philosophy of mind specifically but already they engage in investigations from particular understanding of African cultural perspectives. Wiredu (1987) appreciated the value of using local language to decipher philosophical meaning by interpreting the concepts his society used as expressed in their language. This actually fortifies the point that African philosophy is actually (re)claiming its stake in philosophical enterprise.

Philosophy, as a collective approach, ought to allow space for all to contribute, even in those issues which others still present as if they are only issues that affect the West. I agree with W. J. Ndaba (1999) in his article "The challenge of African Philosophy: A Reply to Mabogo More" who has argued "To effect dialogue between African and Western philosophy on the basis of mutual equality and recognition, we may conclude that contemporary African philosophers must debunk the notion of a 'traditional' African philosophy it its narrowly understood limited sense as a museum piece" (More 1999: 191), this forms part of the important issues that need redress in the acceptance of African philosophy, affirmed as part of the broader philosophy subject canon. In the final analysis, contemporary African philosophy of mind, within the tenets of African philosophy, can and should contribute to the global philosophical debate on equal terms as a speaking, living, vibrant unquestioned tradition, I argue.

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[194] "Towards an African concept of a person: Person in Yoruba, Akan and Igbo thoughts" by O. A. Oyeshile (2012) in *Journal of Religious Studies*.
[195] *Indigenous Shona philosophy: reconstructive insights*. Grahamstown: NISC by Pascal Mungwini (2019).
[196] "A critical analysis of the contribution of selected Shona proverbs to Applied Philosophy". *Doctoral thesis*. Ephraim T. Gwaravanda (2016).

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