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**John Dewey's Epistemological Naturalism and the Prospects for a
Normative Scientific Epistemology**

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By

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Abstract

In this thesis, I inquire into the prospects for a normative and scientific epistemology arising from the version of naturalism that dominates Dewey's later work. I focus on questions such as: Are there peculiar features of Dewey's naturalism that address important concerns of traditional epistemology, such as setting up normative criteria for justifying our claims to knowledge? Does his naturalism engender merging epistemology with science? How relevant are Dewey's original views to contemporary debates in epistemology?

In setting up Dewey's position, which I call epistemological naturalism, I explore how the conceptions of reality and human experience in his naturalist metaphysics serve as a road-map for his epistemology. I explore how his arguments that the world is a mixture of interchanging stable and precarious events and his description of human experience as transaction within nature set the stage for defining all forms of inquiry as problem-driven. I also explore how this conception of inquiry leads to the conception of knowledge as ultimately practical and instrumental. I argue that Dewey's instrumentalist and practical conception of knowledge is ideal for the traditional goal of epistemology identified as *attainment of truth and avoidance of error*. However, I also explore how his position challenges traditional epistemology by replacing the traditional theoretical or conceptual approach to knowledge with a practical and experimental approach, encouraging practical or empirical methodologies. I discuss how this approach to knowledge makes paradigms of knowledge in technological science more relevant to epistemology than those of the natural sciences.

I then focus on the continuity of Dewey's original ideas in two ways: how they are preserved in Richard Rorty's neo-pragmatism and how they are relevant to debates about knowledge in contemporary philosophy. On the connection between Dewey's philosophy and Rorty's neo-pragmatism, I explore how the similarities in Dewey and Rorty's critique of traditional epistemology qualify the latter as a Deweyan. However, I argue that Rorty's popular position, that Philosophy must transcend itself to cultural criticism has no basis in Dewey's philosophy.

I turn to consider how Dewey's analysis of human experience, human-nature symbiotic relations and the social nature of knowledge can resolve some of the disagreements among contemporary social epistemologists on the nature and subject-matter of their inquiry. I also consider how Dewey's instrumentalist conception of knowledge can contribute to contemporary debates on whether knowledge is a natural kind.

The thesis is in two parts. The first part is a critical exposition of Dewey's metaphysics and epistemology. Part Two relates Dewey's views to contemporary philosophy. In Chapter One I articulate how most versions of naturalism are concerned with rendering philosophical views on knowledge and existence more tenable by appealing to science. Two main approaches are identified: radical

naturalists suggest the adoption of the ontology or methodologies of science, and moderate naturalists admit the usefulness of some of the methods and paradigms of science in some specific areas in philosophy. I argue that both positions involve controversial conceptions of how philosophy and science relate to each another. For instance, I explore how some radical naturalists ambiguously use the word “science”. I also discuss the objection that the radical position reduces philosophy to science. In Chapter Two I discuss Dewey’s naturalist conception of experience and reality, and in Chapter Three his theory of knowledge. These are the metaphysical and epistemological components of his naturalism. I explore how the empirical nature of Dewey’s metaphysics and the practical-experimental emphasis of his epistemology challenge traditional metaphysics and epistemology.

The second part has three chapters. In Chapter Four I discuss similarities in Dewey and Rorty’s rejection of traditional theories such as foundationalism, representationalism and essentialism, and other related views which the duo described as absolutist conceptions of knowledge and truth, such as the Spectator Theory of Knowledge and the conception of the human mind as *a mirror of nature*. I disagree with Rorty’s conclusion that Dewey totally dismissed the preoccupations of traditional epistemology and metaphysics, a position Rorty described as therapeutic. I argue that Dewey replaces all theories he rejected with alternative naturalistic views. I conclude that this suggests continuity with traditional philosophy rather than envisaging a post-Philosophy culture as suggested by Rorty.

In Chapter Five I consider how Dewey’s conceptions of the cause, nature, and goal of inquiry as ultimately a social affair resolve some disagreements between radical social epistemologists (such as Fuller) and moderate social epistemologists (such as Goldman and Kornblith) on the nature and subject-matter of social epistemology. From Dewey’s identification of problematic human transactions with nature as the common factor in all forms of inquiry, I consider the possibility of establishing what could be regarded as the basis for all human knowledge. The importance of this position is explored in terms of preventing relativism. In Chapter Six I compare Kornblith’s contention that knowledge is a natural kind with Dewey’s contention that knowledge is a natural transaction, and argue that the latter offers more tenable prospects for a normative scientific epistemology.

My overall conclusion is that taking a Deweyan approach to knowledge engenders an inter-disciplinary approach which makes resources in sociology, anthropology, biology, and technological science relevant to epistemology. By defining normativity in terms of how knowledge is managed to facilitate successful human transaction within nature, epistemic claims are opened to empirical evaluation.

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Chapter One: Understanding Dewey's naturalism as a critique of other versions of naturalism

1.0 Introduction

This chapter focuses on defining naturalism. This is essential to this thesis for two reasons. Firstly, the central argument running through this thesis is that naturalism offers the best prospects for establishing a normative scientific epistemology. Consequently, it is important to examine several attempts by naturalists to find a theoretical position that can be described both as philosophical and scientific. Secondly, there are many versions of naturalism, some of which are antithetical to one another (Bhaskar, 1998; Bilgrami, 2010; De Caro & Macarthur, 2004, pp. 1-36; Wagner & Warner, 1993). So, it is important to have an unambiguous understanding of what naturalism is before any exploration of naturalistic philosophy can start. For present purposes, several naturalists' presuppositions will be examined, including their conceptions of what science is, the relationship between science and philosophy, and the goals of scientific and philosophical investigations. The ultimate goal is to contrast Dewey's version of naturalism with other versions of naturalism and establish it as offering a more nuanced analysis and correspondingly a more tenable position.

Consequently, this chapter offers a critical analysis of four prominent ways that naturalist and non-naturalist philosophers have attempted to define naturalism. These are: defining naturalism as a scientific position, a metaphysical (ontological) position, as a recommendation for the adoption of the methods of science in philosophy (methodological naturalism), and as a project targeting the *naturalization* of traditional epistemology or metaphysics. I explain naturalization in terms of the claim that one field can be reduced to the other or that some specific concepts in a field can be explained by concepts in another field. While it is commonly assumed that methodological naturalism and naturalization of traditional epistemology or metaphysics are identical, I explain that although they

are closely related, they are arguably different senses of naturalism, taking W.V.O. Quine's *Epistemology Naturalized* as an example (1994a).

While all naturalists and non-naturalists have tried to define, defend or criticise naturalism in connection to some conceptions of science or supposed methods of science, I critically examine what these philosophers mean by "science" and "methods of science". I examine whether they mean a particular branch of science (for instance mathematical physics) or a broader sense of science (both the entire natural sciences and the entire social sciences). I also examine what these naturalists have in mind when they mention "the methods of science", whether they mean the experimental (natural, controlled) methods of science, a posteriori or empirical methods, some specific models of explanation (such as Hempel's covering law model) or something else.

Further, given the fact that various definitions offered for naturalism involve both metaphysics and epistemology, I examine (i) what naturalists have in mind concerning traditional metaphysics- whether their positions imply continuation, modification, or elimination of traditional metaphysics and (ii) what naturalists have in mind concerning traditional conceptions of epistemology. Specifically, I examine naturalists' positions on the relationship between epistemology and science, the role of scepticism, and the notion and importance of normativity in epistemology. On the question how naturalists conceive the notion and importance of the concept of normativity in naturalistic epistemology, I treat Quine's attempt to naturalize epistemology as a classic example.

However, it is important to note that the critique of naturalism in this chapter is guided by two goals: understanding and evaluating naturalism. The first goal, (which is a necessary condition for the second) is to establish some unambiguous definitions or analyses of naturalism. The second (which is more important, given the overall goal of this thesis) is to establish a naturalist position that could engender a normative scientific epistemology. My approach to both goals is to identify Dewey's version of naturalism and evaluatively contrast it with other versions of naturalism. Consequently, a critique of several claims, presuppositions

and commitments that define other versions of naturalism, will be undertaken by contrasting them with Dewey's views. The purpose is to establish naturalism as the background to Dewey's philosophy and more importantly to argue that his version of naturalism offers the most informative analysis of naturalism by presenting radically new conceptions of cognitive fields such as epistemology, metaphysics, logic, language and science- redefining their scopes, objectives and relationships. These claims will define the goals of subsequent chapters in this thesis.

This chapter has four sections. In the first, I briefly discuss some problems resulting from the many versions of naturalism. For instance, I will consider the tendencies among philosophers, as noted by De Caro and Macarthur, to regard naturalism as "a hopeless portmanteau term without any discernible core meaning" and consequently not a "particularly suitable candidate for philosophical examination" (De Caro & Macarthur, 2004, p. 3). In the second section I examine some arguments that naturalism is a non-philosophical position, an anti-philosophical position or a non-substantive philosophical position. I consider G.E. Moore's famous "naturalistic fallacy" as a good example. In the third section, I consider tenets of some versions of naturalism that point toward metaphysical theories such physicalism and materialism: naturalism as outright rejection of metaphysics comparable to the positivist programme, naturalism as conceptual analysis and empirical scrutiny of folk concepts, and Kornblith's notion of naturalism as "studying the implications of science for metaphysics". In the fourth section, I focus on naturalism and epistemology. I consider naturalism as a philosophical position stating that philosophy must be methodologically continuous with science. I also discuss naturalists' views on the concept of normativity and problems of scepticism in epistemology. In each section, Dewey's views will be explained.

1.1 Understanding naturalism: the problems of many versions

There are many positions in philosophy that have been described as "naturalistic". Almost a century ago, Roy Wood Sellars commented on a "common naturalism"

that it is a “vague and general sort, capable of covering an immense diversity of opinion” (1922, p. i) In his recent assessment of naturalism (which implies that Sellars is still correct), Richard Gale may not have exaggerated when he noted that there are as many conceptions of naturalism as people claiming to be naturalists (2010b, p. 55). Other writers like Lawrence Sklar (2001, p. 1) and De Caro and Macarthur (2004, p. 3) have also noted this problem.

These writers hold that the existing literature has shown a diverse use of the term “naturalism” which makes the concept or position appear meaningless, most especially with several conceptions of naturalism appearing to be antithetical to one another. This problem makes it reasonable to suspect that naturalists might not be addressing any substantive philosophical issues at all. My contention is that, although the many meanings of naturalism are problematic, it still constitutes a legitimate and interesting subject-matter for philosophical investigation. More specifically, I will contend that there are several unifying doctrines in naturalism, such as ontological naturalism and methodological naturalism. However, these doctrines only facilitate the identification of different versions of naturalism and do not engender a monolithic position. My strongest contention, however, is that, we can make fundamental sense of what naturalism is by concentrating on the problems that made naturalism, arguably, the currently most popular philosophical position.

Wagner and Warner have observed that, the need to *re-define* “the relations among a range of human endeavours such as philosophy, science and art”, informs the preoccupation of philosophers and philosophers of science on naturalism (1993, p. 1). Wagner and Warner and other philosophers such as Akeel Bilgrami, discuss some specific historical occurrences that marked the need to redefine these human endeavours. These include the establishment of physical science as a substantially autonomous institution between 1600 and 1850 and Kant’s reassessment of philosophy and the rise of social sciences (Bilgrami, 2010, pp. 23-24; Wagner & Warner, 1993, p. 1). Consequently, throughout this chapter, I focus on philosophers (both naturalists and anti-naturalists) grappling with questions that relate to the identity or autonomy of philosophy in an age of science. This

problem is succinctly described by Roy Bhaskar as a dilemma between on one hand, the belief that “all ideas, including purely philosophical ones, are to be susceptible of scientific explanation”, and on the other, believing “philosophy to be irreducible and essential, Inter alia, to science” (1998, p. ix). I start my discussion of naturalism by considering whether it is a philosophical position.

1.2 Understanding naturalism as a non-philosophical, anti-philosophical, or a non-substantive philosophical position

Several philosophers have argued that naturalism is a non-philosophical or covertly anti-philosophical position. G.E. Moore’s objection to moral naturalism, which he dubbed “the naturalistic fallacy” provides a good example. According to Moore, any attempt to analyse moral concepts like “good” in terms of natural facts such as “pleasant” or “desirable”, or to draw ethical conclusions from natural facts, is fallacious (1903, p. 10). Moore’s explanation is that the normative significance of natural properties must be established before the viability of naturalism can be considered as a philosophical position in moral philosophy. Erin also argues that naturalism in ethics is an attempt “to analyse the nature and content of morality without relying on evaluative concepts, or at least none other than those employed in the natural and social sciences” (2004, p. 259). While he agrees that it could be useful to find out how moral notions could figure into empirical theories and explanations, he argues that a moral philosopher must engage in substantive moral reasoning that can illuminate the nature of our moral aims and judgements (Erin, 2004, p. 274).

Similarly, George Santayana and Richard Rorty were indignant at Dewey’s desire to establish a system of thought that is both naturalistic and metaphysical (Rorty, 1977; Santayana, 1951). Santayana was amazed that Dewey could claim to be pursuing a metaphysics that is naturalistic because (for Santayana) “metaphysics” and “naturalism” have “contradictory characters”. According to Santayana, in metaphysics there is common acknowledgement of the existence or reality of disembodied powers, immaterial functions and absolute mind independence of

material conditions. He argues that naturalism denies the existence of such entities (Santayana, 1951, pp. 343-344).

In his critique of Dewey's *Experience and Nature*, Rorty argues that he cannot see Dewey's naturalism (naturalistic metaphysics) as a legitimate philosophical position because there is no sense in which "it could be assimilated to the genre which includes the central books of Aristotle's *Metaphysics*, Spinoza's *Ethics*, Royce's *The World and the Individual*, and similar paradigms" (1977, p. 45). Rorty's point is that naturalistic metaphysics as presented by Dewey does not address any substantive metaphysical problem that one can clearly identify. He argued that Dewey's naturalism is best understood as a "therapeutic" stance. A therapeutical stance sees traditional problems in philosophy (like the mind-body problem and subject-object distinction) as pseudo- problems, created by human errors and delusions. The solution to these problems is dismissing rather than solving them (Rorty, 1977, pp. 46, 49,54). Rorty's suggestion is that naturalism is essentially an anti-philosophical position, and he wanted to associate Dewey's position with the project of replacing philosophy with literary or cultural criticism.

In contemporary discussions of naturalism, philosophers such as Kim (1985), Stroud (1985) and Goldman (1993b) have argued that naturalism as presented popularly by W.V.O. Quine is not to be regarded as philosophy, but as psychology or psycholinguistics. One description of naturalism offered by Quine is:

Epistemology, or something like it, simply falls into place as a chapter of psychology, and hence of natural science. It studies a natural phenomenon, viz., a physical human subject. This human subject is accorded a certain experimentally controlled input—certain patterns of irradiation in assorted frequencies, for instance— and in the fullness of time the subject delivers as output a description of the three-dimensional external world and its history (Quine, 1994a, p. 25).

Critics such as Kim have argued that Quine is urging us to abandon the preoccupation of traditional philosophers on how to *justify* our beliefs (which is known as traditional epistemology) and focus on the processes that are involved in the *formation* of our beliefs, which is an aspect of empirical psychology (Kim, 1994, pp. 39-41) For Stroud, Quine is urging us to study human beings and their

knowledge in the same way that one would study an amoeba, a plant or anything else in nature (2004, p. 25). The point they all share is that Quine's "naturalized epistemology" is either an anti-philosophical or reductionist position (an attempt to reduce epistemology (philosophy) to psychology (science), or scientism, the belief that science alone is the pathway to genuine knowledge.

Sorell and Maffie also argued that naturalism as presented by Quine is anti-philosophical and rests on undue scientism. In Sorell's explanation of "scientism", he makes a distinction between an old sense and a new sense. The old sense, includes instances of how great philosophers (like Bacon and Descartes) and economic theorists (like Karl Marx) admitted that *natural science or the exact science is the most valuable, authoritative, serious or beneficial part of human learning* and recommended that *all human cognitive enterprises must have some kind of footing in science* as a necessary condition for having similar success (Sorell, 1991, pp. 1, 76). Here, philosophy can benefit from the methods and paradigms of science without losing its autonomy or identity. The second sense of scientism, on the other hand, is relatively new and more specific. It is a belief shared by some philosophers that philosophy needs to be "replaced by science". Sorell identifies this new scientism as "naturalism" (1991, pp. 3-4, 177). He calls this "the replacement thesis" (1991, pp. 37, 133-140). It is in this sense that Sorell (like Stroud and Kim) sees naturalism as a threat to philosophy (1991, p. 177):

According to the view of epistemology that I am arguing for, traditional philosophical questions occupy the centre of the field, and there is room for questions continuous with these that have been suggested by empirical psychology or evolutionary theory. The view entails that epistemology and empirical psychology can influence one another, but it stops short of implying that epistemology contains or is contained by empirical psychology, and carries no suggestion that work on any unresolved issue from traditional epistemology should be stopped (Sorell, 1991, p. 139).

Sorell's contention is that, whatever advantages philosophers can derive from using the methods of science and applying some of its paradigms, philosophy is not science. He is sceptical about the adequacy or even the relevance of science concerning issues such as the cognitive status of aesthetic feelings (1991, pp. 56-57), moral values (1991, pp. 151-158), fine arts and their value (1991, pp. 59-61).

The question is, to what extent can a naturalist hold some subject-matters in reserve concerning the adequacy of science?

In his critique of naturalism, Maffie makes a distinction between a “strong version” of naturalism which he calls strong or “eliminative naturalism” and moderate naturalism. He identifies two prominent ideas in eliminative naturalism. First, the idea that we no longer understand science as just one form of possible knowledge, but as the only paradigm of knowledge, which he called “one dimensionalism” (1995, p. 12). Secondly, the presentation of science as “self-validating” which he called “dogmatic methodism” (1995, p. 15). Maffie contends that these ideas are scientific fallacies and constituted *an illegitimate expansion of science into epistemology* (1995, p. 1). Moderate naturalism, in contrast, “upholds the non-identity of epistemic ends, norms, and concepts with scientific evidential ends, norms, and concepts” (1995, p. 12). Maffie believes that, based on moderate naturalism, epistemology is contrasted with science in the sense that epistemologists’ interest lies in “acquiring truths that are rooted in the instrumental utility of true beliefs and disutility of false vis-a-vis the satisfaction of our ends”. He believes this fact insulates epistemologists’ interest from “arbitrariness” or “idiosyncrasies” (1995, p. 5).¹ For him,

Such an anthropology of epistemology approaches human epistemic practices in an a posteriori manner paralleling anthropological and sociological approaches to cultural practices such as magic, religion, and law. It adopts an anthropologically distanced or ‘strange’ view of epistemology, seeking to understand its nature, aims and province in terms of life circumstances in which it is organically situated and sustained (Maffie, 1995, p. 5).

In essence, Maffie’s interest lies in a kind of naturalism that will make epistemology (philosophy) continuous with science without losing its normative and evaluative dimensions as conceived in traditional epistemology (1995, p. 20).

¹ For Maffie, weak sense naturalism rejects a number of theses that an anti-naturalistic epistemology endorses: that epistemology employs evidential norms and standards epistemically higher than science, employs sui generis, a priori methods or evidence, proceeds from vantage points independently of findings in science, yields results epistemically firmer and higher than science and prior to science (1995, pp. 2-11). For him, moderate naturalism suggests “a fundamental reorientation in our study of epistemic practices: one more akin to an historically-, socially-and cognitively-minded anthropology than to mathematics”. (1995, p. 5)

By rejecting some features of traditional philosophy, such as seeing a priori method as a paradigmatic route to the acquisition of truths and seeing philosophy as epistemologically prior and foundational to science, Maffie hopes to differentiate his position from some traditional positions that accept the idea that scientific paradigms are essential or useful in philosophical investigations but decline subscription to naturalism.

Arguably, philosophers such as Sorell, Kim, and Maffie, who are critical of scientific tendencies in philosophy, identify Quine's version of naturalism in particular, and naturalism in general, with Hempel- and Oppenheim's quest for the "unity of science" in which attempts were made to reduce all cognitive enterprises to science. Hempel et al wanted to establish that only explanations that conform to the deductive nomological model of explanation (which is a model of explanation in science) are to be regarded as genuine explanations (Hempel & Oppenheim, 1948). In this regard, the reason for the arguments for eliminative naturalism and the quest for the DNM model of explanation in all cognitive fields will be an attempt to grant science what Maffie calls "epistemic monopoly" (Maffie, 1995, p. 1).

If naturalism is defined as an "anthropology of epistemology" as suggested by Maffie, how can it escape the kinds of criticisms raised against Quine's naturalized epistemology? It should be noted that many epistemologists have argued that while both psychology and anthropology are descriptive cognitive fields, epistemology is essentially normative (Goldman, 1993b; Kim, 1994; Kornblith, 1983, 1994b; Stroud, 1985). This is a problem that both Maffie and Sorell did not address. What of Maffie's idea that a naturalistic stance in epistemology necessitates the adoption of an approach that seeks to understand each phenomenon *in terms of the life circumstances in which it is organically situated and sustained* (1995, p. 5)?

Arguably, this position resembles Dewey's version of naturalism. One of the fundamental tenets of Dewey's naturalism is expressed in the claim that everything: the different stages in the development of science, philosophy, songs,

culture, magic, religion, and so on, are “growth-processes”, having the same naturalist account with “the growth from infancy to maturity, or the development of a melodic theme” (J. Dewey, 1925, pp. 224-225). For him, they are responses, at different stages, emanating from human transactions with nature.² Dewey’s naturalist model of “growth”, as noted by Thomas Alexander, is that, “growth is the genuine realization of possibilities between the organism and its environment” (T. M. Alexander, 1987, p. 32). Dewey’s strongest naturalist claim is that every human transaction finds origin in some symbiotic relations with nature, a natural account that explains cultural differences in terms of contextual, superficial or circumstantial differences in the modes of responses and consequently “growth”. Thus, unlike Dewey’s more comprehensive account, Maffie did not explain how such cultural-based naturalist epistemology will address the problem of cultural relativism that is bound to confront his anthropological epistemology. It is in this sense that Dewey’s naturalism promises a more comprehensive account of naturalism.

If naturalism is a philosophical position, what kind of position is it? Some naturalists have seen it as a substantive theoretical position that offers answers to metaphysical or ontological questions in philosophy. This is what I explore in the next section.

1.2.1 Naturalism and Metaphysics

There are several different conceptions of naturalism as a metaphysical position in philosophy. In this section, I consider naturalism as a rejection of supernaturalism, and as a physicalist or materialist position. I consider how these positions raise questions concerning the identity, autonomy or substantiveness of the discipline of philosophy in the age of science. Consequently, I discuss how these different metaphysical understandings of naturalism generate problems

² Dewey describes changes in organisms and nature, as a result of the symbiotic relations to be understood naturalistically as “a more extensive history of nature” (J. Dewey, 1925, p. 225).

such reductionism and eliminativism. I start by exploring the idea that naturalism opposes supernaturalism.

1.2.2 Understanding naturalism as a rejection of supernaturalism.

The rejection of supernatural entities (such as God, gods, ghosts, spirits, souls, and vital spirits) has been considered by some philosophers as the simplest and most common definition of naturalism (Dupre, 2004, pp. 36-38; Kai, 2001) . From this point of view, entities in the physical world like human beings, chairs, rocks, stones, and other physical entities are regarded as “natural” or “material”. Events involving any of these entities in space and time are called natural events. Given the fact that these physical entities are subject to laws of nature, they are said to lie within the normal course of nature. Supernatural entities on the other hand are said to be immaterial things existing outside the normal course of nature. According to Dupre, antisupernaturalists reject the idea that supernatural entities exist as immaterial things, which are not “space-occupiers” and whose physical engagements in the material world cannot fall into the subject-matter of physics. From this position, one can easily define naturalism as a theory that affirms that only material entities or natural things exist (2004, p. 37).

Dupre noted that there are “perfectly respectable immaterial entities like concepts, numbers or hypotheses”. He is not alone in this opinion. In the philosophy of mathematics, debate is on-going between scholars who believe that mathematical objects (numbers and sets) have some type of objectively real status that we can access in some ways, on one hand, and those who believe that mathematics is obviously not about anything but a self-contained system of discourse, on the other. Several philosophers subscribe to Plato’s theory that mathematical objects are outside physical space, abstract, eternal, unchanging, and necessarily existing (Howell & Bradley, 2001, pp. 65-66; Maddy, 1992, p. 21; Putnam, 2001, p. 150; Quine, 1981a) If mathematical objects are immaterial and

are nonetheless accepted as ontologically real, then, the argument of the anti-supernaturalists that *only material objects exist* will become weakened.³

In addition, Dupre raised the possibility of considering immaterial entities like “the concept of revolution” and immaterial phenomena like “class struggle” as having causal powers (in the sense of being harbingers of changes in the world), but he seems to have conceded (too easily) this possibility on the ground that this “sense of causal power” is not acceptable in naturalism (or better still, in physics) (Dupre, 2004, p. 37). However, it could be argued that the conception of “cause” and the enumeration of causal agencies in physics are different from what obtains in anthropology, sociology or history. If quantum mechanics tells us that *what actually occupy space are not physical entities but waves* (Dupre, 2004, pp. 37-38), then, we have no reason to accept that an entity needs to be material before it could exist or be a legitimate causal agent. So the antisupernaturalists’ conceptions of “natural” and “material” are controversial. The rejection of supernatural entities, according to Dupre, is based on the controversial premise that the ontological account offered by physics (and no other science) is correct (2004, pp. 55-58).

In Stroud’s view, the naturalist position that only material or physical things exist is not acceptable, since it will imply that there are no psychological facts. The fact that people do have thoughts, beliefs, and care about things, according to him, is a pointer to the fact that the world is more than physical things alone (2004, p. 27). His more biting argument, however, is that naturalists’ claim that only physical things exist is not a conclusion that is arrived at naturalistically, because it contains a claim that goes beyond all the physical facts said to be available to the naturalists (2004, p. 27).

³ The disagreement seems to rest on different notions of “immaterial” and “physical”. A similar argument ensued in science. A scientist may argue that an electron is “immaterial” because “it is so much smaller as to be appreciable by our methods of measurement of material masses” (Bousfield & Bousfield, 1927). Others may argue that despite its sizelessness or masslessness, it is “material” or even “physical”, because it is observable.

Philosophers such as Plantinga have also argued that a naturalist who denies the existence of the creative deity but accepts contemporary evolutionary theory, is irrational. He argues that if naturalism is associated with the metaphysical thesis or view that *only natural objects, kinds, and properties are real*, then naturalists would have a problem incorporating into their thesis the evolutionary theory that human beings have been able to avoid extinction because of certain mechanisms they have been endowed with that enable them to adapt to varying and hazardous circumstances of nature (2002, pp. 1-12). His point is that evolutionary theorists have been able to explain how some mechanisms enabled human beings to survive but that Christian theism has explained why the mechanisms have been put there in the first place by an intelligent God. For Plantinga, naturalism needs evolutionary theory to be theoretically relevant, but evolutionary theory includes a clause that turns out to be a defeater for naturalism. However, it is notable that the theory of intelligent design is controversial in a way that evolutionary theory is not. However, exploring this argument is not part of present purposes. What is important is that it is very hard to get a non-controversial definition of what naturalism is, simply by rejecting supernaturalism.

Turning to naturalists such as Dewey makes the attempt to understand naturalism as a rejection of supernaturalism more problematic. For instance, Dewey rejects natural/supernatural distinctions as one of the dualist themes that he emphatically describes as dialectical “classificatory devices”. (Other classifications include: body/mind, nature/man, object/subject and appearance/reality). He contends that bifurcations emanate from traditional metaphysics, which he describes as dialectical, transcendental, unempirical, and consequently non-naturalistic. Regarding these “classificatory devices” and the numerous pseudo-problems they created, he writes:

The most widespread of these classificatory devices, the one of greatest appeal, is that which divides existence into the supernatural and natural.... There is a long story between the primitive forms of this division of objects of experience and the dialectical imputation to the divine of omnipotence, omniscience, eternity and infinity, in contrast with the attribution to man and experienced nature of finitude, weakness, limitation, struggle and change... One realm is the home of assured appropriation and

possession; the other of striving, transiency and frustration... It pleases man to substitute the dialectic exercise of showing how the "finite" can exist with or within the "infinite" for the problem of dealing with the contingent.... Wisdom then consists in administration of the temporal, finite, and human in its relation to the eternal and infinite, by means of dogma and cult, rather than in regulation of the events of life by understanding of actual conditions (J. Dewey, 1925, pp. 48-49).

Dewey's reason for his rejection of a natural/supernatural bifurcation seems to shed more light on what naturalism is than merely seeing naturalism as a rejection of supernaturalism. For him, the distinction between natural and supernatural is arrived at through a priori reasoning and conceptual analysis (1925, pp. 1-36). Thus, it is dialectical rather than empirical and experimental. The distinction is consequently superficial and artificial. Naturalism, for him, necessitates focusing on what he calls "the inclusive integrity of experience" (1925, p. 11). For him, this reveals that man is part of nature and all his experience (esthetical, intellectual, moral, social, cultural and religious) emanates from symbiotic relations with nature. Consequently, Dewey thinks that his account of human experience offers natural explanations or bases for phenomena such as supernatural experience and phenomena.

In *Experience and Nature*, Dewey's central argument is that only a naturalistic metaphysics that uses empirical methods of inquiry, appeals to evolutionary theories, and to other paradigms in the sciences, can give a correct account of experience, reality or existence. For him, a consistent naturalist will reject any bifurcation between nature and human experience. The refusal lies in resisting any dialectical interpretation of the multifaceted manifestations of nature in terms of tagging precarious things (or phenomena) as "natural" and stable things as supernatural in the sense of being outside nature. According to him, for a naturalistic study of nature, "the starting point is precisely the existing mixture of the regular and dependable and the unsettled and uncertain" within nature (1925, p. 49). This is one of the most fundamental tenets of Dewey's naturalism.

However, in spite of Dewey's dismissal of natural/supernatural and transcendental/natural distinctions, he seems to rely on a distinction between transcendental and non-transcendental to differentiate his version of metaphysics

from the traditional metaphysics he criticises, most especially in his bid to establish an empirical and practical metaphysics (1925, pp. 36, 140, 184-185, 305). Consequently, the rejection of transcendentalism can be stipulatively interpreted to affect not only idealist non-empirical claims that Dewey rejects, but empirical-scientific claims that he would like to hold sacrosanct. For instance, just as it can necessitate the rejection of any metaphysical theories (for instance, Hegel's idealist' theory of absolute spirit) or epistemological theories (for instance, a conception of an absolute truth that relates to no particular context), it can also necessitate the rejection of scientific theories (for instance, the theory of "black holes" in science, evolutionary theories that precede human history) on the ground that they involve "transcendental" claims. The suggestion is that conceptualising naturalism as a dismissal of supernatural/natural or transcendental/non-transcendental distinctions may not significantly increase our understanding of what naturalism is. In chapters 2 and 3, a deeper exploration of Dewey's' naturalistic metaphysics and epistemology is expected to shed more light on his version of naturalism. I now turn to another attempt to understand naturalism as a physicalist position.

1.2.3 Understanding naturalism as a physicalist or materialist position

Several philosophers have described naturalism as the most prominent among philosophical theories in recent time, for instance, Wilfrid Sellars (1979). According to him, naturalists give full and unqualified credence to science in respect of answers to questions concerning the kinds of entities that exist. Naturalists often expressed their confidence in scientific ontology by appealing to the statement often credited to Wilfrid Sellars that "science is the measure of all things, of what is that is, and of what is not that it is not" (Kornblith, 2014b, p. 105).

This trust in science usually covers two interrelated aspects: acceptance of the ontology and of the methodologies of science. For instance, Macarthur identifies the ontological thesis in naturalism as stating that "the only things that there are in the world are those things that are presupposed or posited by the successful sciences (2010, p. 125). Several philosophers have agreed that scientific knowledge and methodologies are more reliable than what obtains in other disciplines such as philosophy (Wagner & Warner, 1993, pp. 1-2), or maintained a

stronger claim that “our beliefs are ultimately justifiable only by the methods of science” (Baker, 2013, p. xvi).

Others have seen the prominence of naturalism in its possibility of reshaping the entire human cognitive endeavour: methodologies, paradigms and the relationship between different cognitive disciplines (Wagner & Warner, 1993, p. 1). Here, science becomes the paradigm of knowledge and every account of what exists must be countenanced by science. However, as pointed out by De Caro and Macarthur, there is a specific ontological account mostly favoured by naturalists - an account of (empirical) causal influence on physical processes (2010, p. 4). Consequently, the possibility of naturalism is interpreted as the possibility of identifying a branch of science with this particular credible ontology to serve as a paradigm for knowledge. However, philosophers who are anti-naturalists argue that naturalism is synonymous with scientism- the pejorative description of science as the only true form of knowledge. But for some naturalists, *scientism* is not as derogatory as often implied.⁴ Is naturalism synonymous with scientism? If it is, how can seeing naturalism as scientism be philosophically interesting? If it is not, what is the distinction between them?⁵

1.2.3.1 Extreme naturalism: Understanding naturalism from the idea that physics is the image of science

Macarthur discusses how some philosophers see physics as the only irreducible and legitimate science (2010, p. 128). He cites their major reason; that “the only entities there in the world are those posited by (current or idealized) physics and that this makes the ontology of microphysics, “the only science worth taking seriously”. Consequently, physics is regarded as the image of all natural sciences. Macarthur identifies the version of naturalism that is based on this view as extreme (2010, p. 126).

⁴ While acknowledging the pejorative connotation of scientism, Jerry Fodor defines it differently, as comprising two claims: ‘that the goals of scientific inquiry include the discovery of objective empirical truths’ and that “science has come pretty close to achieving this goal at least from time to time”. He defines scientism as “the scientist’s philosophy of science”. This is a phrase credited to Hilary Putnam (2002, p. 30).

⁵ One might disagree that scientism and physicalism are the same thing. For instance, one might claim that scientism is methodological while physicalism is ontological. The question is: How does this stance shed light on naturalism?

Wagner and Warner observed that physics assumed a leading or autonomous role between 1600 and 1850 which led it to be regarded as the first among other fields of science such as chemistry and biology. With the success of science and physics being assumed as the 'face' of science, there is a tendency to give credence to physical theories and the ontological account they favour.

We take naturalism to be the view only natural science deserves full and unqualified credence. 'Physicalism' would seem to connote a narrower view that privileges specifically physics, as opposed to natural science in general (Wagner & Warner, 1993, p. 1).

Consequently, for Wagner and Warner, "underlying the ontological approach is the idea that reality is physical reality" and more importantly, "the thrust of naturalism, on this view, is that we should believe only in physical things" (Wagner & Warner, 1993, p. 12).

Wagner and Warner give another explanation for how *treating physics as the only science worth taking seriously*, works, using the truths in physics to measure truths in other scientific and non-scientific discourses. For instance, disciplines such as philosophy and folk psychology (that deal with claims involving intentional and epistemological notions) can be regarded as non-naturalistic by pointing out the differences between the claims and discourses those disciplines favour and what physics does. For Wagner and Warner, "the naturalists compare our intentional descriptions with descriptions in the language of physics and find the former deficient in point of precision, clarity, empirical power, and the like. Folk psychology is judged as science and falls short". The suggestion in this explanation is that naturalism recommends that any ontological account (metaphysics, biological, etc.) that is incompatible with the ontology of micro-physics is either eliminated or reduced to physics. Here, incompatibility is defined in terms of positing ontology that physics will regard as recalcitrant:

A naturalist would characteristically claim that such key philosophical notions as mind, cause, self, or knowledge are indeed important objects of study but that their serious use requires, at least in the long run, "naturalization." That is, such notions are to be defined strictly from terms of established science (perhaps science of the future). Alternatively, one might hold that naturalistic counterparts or analogs of these

notions should ultimately replace them. Either way, the commitment is to making our talk of mind, self, and allied notions scientific (Wagner & Warner, 1993, p. 3).

The main suggestion is that naturalization is always the focus when naturalists are dealing with philosophical problems. The process of naturalization is defined essentially as re-describing philosophical concepts or phenomena strictly in scientific terms with the scope of 'science' recognized within microphysics. This reductionism takes two forms: naturalization and elimination. For instance, to "naturalize" the functioning of the human mind, we must re-define it in some terms such as neurons firing in the brain, rather than giving a philosophical explanation by ascribing some cognitive powers to the human mind. To naturalize the philosophical concept 'knowledge' we can define it in terms of some cognitive processes. In this regard, to "naturalize" a concept simply means to redefine it in a way that is free from a priori or common-sense conceptualizations (Wagner & Warner, 1993, p. 3). For Macarthur, *naturalization* as "semantic projects" aims "to reduce or explain the concepts in some supposedly problematic area of discourses ... in favour of scientifically kosher concepts"(2010, p. 125). The alternative is to drop problematic concepts (such as "mind "or "consciousness" in philosophy of mind and "knowledge" in epistemology) altogether by replacing 'mind' with the neuroscientific concept of human brain and 'knowledge' with cognition, which are their analogs in science.

David Macarthur also identifies three ideas that served as "ideological props" for extreme metaphysical scientific naturalism: (i) strict physicalism, the metaphysical doctrine stating that "all that exists in the world are posits of physics as it stands": (ii) the metaphysical idea that the world has a single causal structure (causal fundamentalism), and (iii) the metaphysical idea that the sciences must constitute an ultimate unity (the unity of science) (2010, pp. 130-131).

How instructive is this version of naturalism? If naturalism advocates that we believe only in physical things, is the truth of physicalism vindicated? I don't think so, because we need first to establish the truth of this version of naturalism. At best, it will vindicate the claim that naturalism is a metaphysical theory. For extreme naturalists, naturalism defines a new conception of philosophy or a new

preoccupation for philosophers. It also defines a new conception of the relationship between science and philosophy.

I think the picture of naturalism from our discussion so far is sketchy. For instance, if naturalism recognises physics as independent and the only image of science, it means that other sciences are reducible to physics. It will affirm the theses Papineau described as “the internal completeness of physics (1993, pp. 13-16). However, the fact that mathematics is indispensable in microphysics seems to suggest that the supposed completeness of physics is not correct. For Macarthur, the failure of the deductive nomological conception of science is another factor that renders false the notion of physics as the only image of science. For him, the deductive nomological conception of science was “built around generalizing the case of an idealized physics” (Macarthur, 2010, p. 129).

In addition, noting the importance of evolutionary theory and genetics in contemporary sciences, Macarthur points out the growing consensus that biology is another distinct paradigm of science (2010, p. 128). He concludes that “the failure of the programs to reduce all science to physics implies that naturalist ontology must reflect whatever scientific explanations are successful, whether or not they lie outside the domain of physics” (2010, p. 130). So, this contentious idea that physics is the image of science can’t give us a firm grip on what naturalism is.

Moreover, Macarthur contends that the program of naturalization implies the assumption that there is a stark divergence between what Sellars called “the scientific and manifest image of the world”. He argues that:

If the world is nothing but the world-as-posit-ed-by-the-sciences then we confront the problem of how to “place” items that appear in the more expansive manifest image in the restrictive world that science has supposedly revealed to us (Macarthur, 2010, p. 126).

Macarthur’s argument is that science need not be defined as radically opposed to common sense “experience” of the world. Put differently or in a wider perspective, the contention is that the reductionist or eliminativist stance of radical ontological naturalism poses a threat to metaphysical theories that recognise both physical and non-

physical aspects of reality, such as dualism and double-aspect theory. If naturalism is synonymous with physicalism, it follows that all non-physicalist theories must be reduced to physicalist theories or eliminated. However, it is arguable that one-stance views on issues are rare in critical philosophy. For instance, in philosophy of mind, the argument about the possibility of explaining human consciousness through the activity of the brain is arguably inconclusive. More importantly, the relevance of physicalist theories in some domains in philosophy such as morality, aesthetics and language is not clear.

Dewey's naturalist metaphysics suggests that naturalism is not synonymous with physicalism. He disassociates his naturalism from physicalism (or reductive materialism) by rejecting the monist view that strictly identifies human mind as brain or reducible to physiological processes. He sees human mind as evolved from and remaining rooted in material existence (J. Dewey, Sidney, & Nagel, 1994). In addition, physicalism or reductive materialism offers a uniform or reductionist view about reality that is not compatible with Dewey's pluralist conception of reality. For him, physicalism or materialism is just one of the numerous ways of describing aspects of nature that feature in human transactions within it.

However, his stronger argument is that a naturalist inquiry need not start with highly technical philosophical theories (such as physicalism, materialism and behaviourism) or with distinctions between physical, chemical, biological or behavioural regions of science because these are special or technical coinages (or divisions of the subject-matters of inquiry or functional categories) which are developed at some advanced "stages of inquiry" (J. Dewey & Bentley, 1949, pp. 65, 299) which he calls "secondary" and cognitive" human experience. For Dewey, the natural starting point is the primary experience in which humans have crude, non-reflective or non-cognitive transaction within nature (J. Dewey, 1925, p. 7). Thus, a naturalist account of reality must go beyond physicalism or materialism and focus on what he calls the "inclusive experience" (J. Dewey, 1925, p. 11). This includes:

what men do and suffer, what they strive for, love, believe and endure, and also how men act and are acted upon, the ways in which they do and suffer, desire and enjoy, see, believe imagine... (J. Dewey, 1925, p. 10).

Dewey's point is that physicalism cannot provide a complete picture of human experience within reality. Thus, it is arguable that Dewey's naturalism explores the "foundation" of human environment-organism transaction and how it informs all cognitive human endeavours: politics, magic, morality, religion, music, and what he calls esthetics. This refutes the assumption noted by MacArthur in radical naturalism that the world posited by science radically opposes the world of common sense. I discuss Dewey's naturalist conceptions of reality and human experience in depth in Chapter 2 showing his conception of how human transactions in nature provides the basis for understanding how all cognitive human efforts complement one another. I also offer a deeper discussion of Dewey's account of how human secondary or cognitive experience provides a framework for epistemological naturalism in chapter 3. I now turn to discuss the version of naturalism that recognizes the combination of physics, biology, and chemistry (hard sciences) as providing the correct picture of reality. I examine the suggestion that this version offers new and deeper analyses of naturalism beyond physicalism or eliminative materialism. I also discuss how Dewey's naturalism challenges this view through his instrumentalist conception of science.

1.2.3.2 Understanding naturalism from the contention that the ontology in "hard" or natural sciences provides the only pathway to reality

MacArthur, Wagner and Warner noted the narrowness of science that is implied in the idea that physics is the only science worth taking seriously. According to them, "the self-described physicalists also endorse chemistry, ecology, neuroanatomy, and the like", consequently, the supposed demarcation between physics and other natural sciences is questionable (MacArthur, 2010, p. 126; Wagner & Warner, 1993, p. 1). In addition, Wagner and Warner note that, "science", apart from its scope, means the recognition of an acceptable standard for empirical and experimental methodologies, paradigms, and goals (1993, p. 9) Perhaps, these are what all natural sciences have in common and are not the monopoly of any field in natural science. For instance, the theory of natural selection has become a standard paradigm of knowledge in the sciences although its origin can be traced to evolutionary biology. There is also the common saying

that mathematics is the language of all sciences. Thus, what is called “science” is not physics alone but the combination of all fields of natural sciences.

What are the impacts of this enlarged scope of science on our understanding of what naturalism is? First, the view that naturalism can be explained through the tenets of physicalism (for instance, the idea of supremacy of the ontology of microphysics) will be untenable. For instance, if mathematics is accepted as science (as the language of hard sciences) and mathematical objects such as 3, +, and x are abstract (in terms of being non-spatial and non-causal (not entering into causal relations with other objects) as argued by philosophers such as Plato, Russell (1959), Quine (1980) and Putnam (1971), then the idea that the ontology of microphysics is complete will be false.⁶ More importantly, the presumption that strict adherence to physicalism provides an explanation of what naturalism is will become problematic.

Secondly, it is arguable that a version of naturalism that recognizes only physics, chemistry, and biology as “the science” on the presumption that only through the ontology of the natural sciences can reality be known, is endorsing the elimination or reduction of the human or “soft” sciences such as sociology, anthropology, history, and demography. In this sense, Alex Rosenberg will be correct in stating that naturalism is a position defending the positivist insight that objective knowledge can be certified “independent of its social and psychological context” (1996, p. 3). However, Rosenberg seems to be wrong when we consider various attempts that have been made to convey a “naturalist framework” into social sciences. Such attempts include: (i) considerations on the possibility of applying natural laws to the study of society, culture, economics (K. Russell, 1971, pp. 3-17) and historical explanations (Hempel, 1965, pp. 35-48) and (ii) the possibility of objective or value-free inquiries in social sciences (Winch, 1958). However, I will not evaluate the success of these attempts.

⁶ It is important to note that philosophers such as Kitcher (1984) and Maddy (1990) have also attempted a rejoinder that mathematical objects are about physical objects. However, this debate is not part of the scope of this thesis.

It is arguable that, like the version of naturalism that endorsed the ontology of micro-physics discussed earlier, this version also can be challenged as a reductionist program because it implies the imposition of the modes of explanation in the sciences (deductive or causal models of explanation and laboratory experimentation) on social sciences despite having subject-matters that are significantly different from natural sciences. The reductionist challenge can also be extended to the idea of a value-neutral social sciences, reducing value-laden social sciences to value-free ones.

What is Dewey's view in reference to the idea that the truth of the ontological accounts offered by natural science is sacrosanct? Fundamental to Dewey's philosophy is his naturalistic and instrumentalist conception of science, in which natural sciences are naturalistically explained as means towards "human survival". According to Dewey,

Neither science nor technology is an impersonal cosmic force. They operate only in the medium of human desire, foresight, aim and effort. Science and technology are transactions in which man and nature work together and in which the human factor is directly open to modification and direction (J. Dewey, 1968, p. 26).

However, given Dewey's instrumentalism, technological or engineering sciences become his model of science. He writes:

What is sometimes termed "applied" science, may then be more truly science than is what is conventionally called pure science. For it is directly concerned with not just instrumentalities, but instrumentalities at work in effecting modifications of existence in behalf of conclusions that are reflectively preferred (J. Dewey, 1925, p. 134).

Thus, for Dewey, a philosopher is a naturalist when she recognises the instrumentality of all human cognitive endeavours. This instrumentalism is defined in recognition of the fact that every attempt to understand nature began from some problematic human experience that cognitive endeavours are meant to resolve. In addition, nature is inherently an instrument to be manipulated or modified in order to enhance human survival. This is perhaps the greatest challenge to the two versions of naturalism that we have discussed in two ways. Another challenge is that Dewey's account of human raw encounter or transaction

within nature (naturalist metaphysics) precedes science and consequently provides a natural starting point for all cognitive inquiries. More importantly, there are cognitive and non-cognitive aspects of this transaction that engender both value-free and value-laden inquiries. Consequently, there is no need to reduce one aspect of this transaction to another. In chapter 2, I discuss Dewey's account of how scientific and non-scientific inquiries complement one another.

1.3.2.3 Broadest naturalism: Understanding naturalism from the perspectival ontologies of both natural and human sciences

The third popular naturalist position discussed by Macarthur admits that the sciences comprise both the hard sciences (physics, chemistry and biology) and some human sciences: "those that are pulling their explanatory weight seriously" (Macarthur, 2010, p. 126). Macarthur suggests that we take the position of the naturalists who recognise both natural sciences and some human sciences as more credible (broad scientific naturalism).

What are the consequences or implications of the idea that disciplines such as economics, sociology and anthropology are included in the scope of "science" for our understanding of naturalism? Debates in contemporary philosophy of the social sciences seem to favour the idea that physicalism is not a consensus in social sciences.⁷ Consequently, there will be different perspectives on ontology: while micro-physics will represent a perspective on ontology, behavioural psychology may emphasise a different aspect.

How does this shed light on our attempt to define naturalism? One suggestion is that naturalism will be a position that encourages philosophers to appeal to any paradigms in any field of the sciences. For instance, David Papineau, like Wagner and Warner, recognises the paradigmatic roles that the ontology of science plays

⁷ In these debates, philosophers such as David Papineau have argued that physicalism forms a consensus in the social sciences (Papineau, 2009, pp. 103-123). Others, such as Philip Gorski have argued that consensus in respect of physicalism is weak in areas of human sciences such as behavioural economics. His contention is that, while "actors" qua persons are directly observable, phenomena such as "desires", "beliefs" and "opportunities" in the human sciences where phenomena such as human "desires", "beliefs" and "opportunities" that feature as important subject-matters are not (Gorski, 2009, pp. 147-196; 179).

and how scientific categories are needed to explain the behaviour of matter, which indicates that “the continuity of philosophy and empirical science is uncontentious”. However, he notes that this fact does not imply “that philosophical issues are not different from kinds of issues normally addressed by natural scientists” (Papineau, 1993, pp. 2-3). Commenting on the work of Brian Leiter on Nietzsche’s naturalism, Christopher Janaway and Simon Robertson agree that Nietzsche is not a substantive naturalist in terms of defending that “only the properties picked out by the laws of physical sciences are real”, but that he seeks “to reveal the causal determinants” of human phenomena by locating them in, and explaining them mainly in terms of, “physiological and psychological facts about persons” (Janaway & Robertson, 2012, pp. 5-6).⁸ Thus, from this view, a naturalist is a philosopher who is at home with science “once she realises how central it is to her ongoing effort to understand the world” (Maddy, 2007, p. 2). Consequently, the suggestion seems to point at a quest for an interdisciplinary approach to gaining knowledge as our best understanding of what naturalism is.

The problem with understanding naturalism in this sense is that, some philosophers who are often referred to as anti-naturalists due to their notion of that irreducibility of philosophy (such as Hilary Putnam and Donald Davidson),⁹ are disposed to the idea of philosophers’ appealing to paradigms in the sciences. In addition, Macarthur notes that some philosophers who are scientific naturalists (such as Frank Jackson, David Armstrong and David Lewis) understand “scientific naturalism” “as being opposed to certain traditional or outmoded forms of metaphysics but not to metaphysics as such” (Macarthur, 2010, p. 129). In *Conscious Mind*, David Chalmers contends that the physicalist or scientific

⁸ It should be noted, however, that, while Janaway and Robertson think that Leiter interprets Nietzsche’s locating and explaining human phenomenon in terms of ‘physiological and psychological facts about persons’ as equivalent to reducing the bulk of human phenomena to ‘psycho-physiological states and process’, they are sceptical about this supposed reduction (the ‘substantive’ or radical interpretation of his naturalism) based on the suggestion that it might be very difficult to read Nietzsche as a subscriber to some systematic, mechanistic, or scientific views about human beings (Janaway & Robertson, 2012, pp. 3, 6).

⁹ For instance, Putnam pursues the argument that “the idea that philosophy is not to be identified with science is not to deny the intimate relation between science and philosophy” (Putnam, 2010, p. 94).

approach to the nature of consciousness can only provide explanations concerning how consciousness works in the brain but not what consciousness irreducibly is. He tagged what the scientific approach can explain as the “easy” problem while the problem presumed to be beyond science is tagged the “hard” problem (Chalmers, 1996). Thus, what is problematic about defining naturalism is how to distinguish between naturalists and their rivals once they admit that physicalism only applies to some aspects of metaphysics or that some aspects of philosophy are irreducible to science.

Consequently, it is notable that philosophers are bothered concerning how substantive or autonomous philosophy can be in any naturalistic quest for the adoption of interdisciplinary approaches. Is philosophy autonomous, superfluous or an appendage to science? Apparently, all the versions of naturalism we have considered so far are incapable of showing how to defend the substantiveness of philosophy in a naturalistic formulation. It is in this sense that turning to Dewey’s version of naturalism becomes important, most especially in the sense in which he explores how scientists, naturalist metaphysicians and naturalist epistemologists can play equally substantive roles in human cognitive endeavours and quests for survival in the world.

In *Experience and Nature*, Dewey’s approach takes three important steps toward the establishment of a metaphysics and an epistemology that complement scientific endeavours. Firstly, he rejects the traditional dichotomy between humanity and nature on the ground that naturalism teaches us that man is part of nature. Secondly, he argues that human experience points to the precarious and settled aspects of nature. For him, “it is not experience which is experienced, but nature – stones, plants, animals, temperature, electricity... Things interacting in certain ways are experience....” (J. Dewey, 1925, p. 4). Seeing experience as subjective consciousness of particular individual human beings, as traditional metaphysics does, is unnaturalistic. Thirdly, he argues that we have primary-cognitive and secondary-cognitive components of experience. The non-cognitive experience form the subject-matter of a naturalistic metaphysics while the cognitive aspects form the preoccupation of science and thus creating a “division

of labour” between the two cognitive endeavours (1925, pp. 113-123). Finally, he concludes that experience is the only subject-matter for both science and philosophy. For him “the natural sciences not only draw their materials from primary experience, but they refer it back again for test” (1925, p. 7). I discussed these arguments in detail in chapter two where Dewey’s metaphysics was extensively explored. I next will turn to discuss the possibilities of understanding naturalism from epistemological claims of naturalists.

1.3 Naturalism and epistemology

In this section, I discuss the possibility of understanding what naturalism is from philosophers’ quest for the adoption of the methods of science in philosophical investigations. This quest is often described as *methodological naturalism*. I will also discuss the views of some naturalists on two specific questions dominating traditional epistemology. The first is: In the age of science, what is the fate of the normative concerns of epistemology? The second is: What is the position of naturalism on the problems of scepticism? I start with the former.

1.3.1 Understanding naturalism from philosophers’ quest for the adoption of scientific methodologies

Methodological naturalism is another prominent theme that has arisen in defining naturalism. It is often described as naturalists’ quest for the adoption of scientific methods in domains such as philosophy and is usually treated as a corollary of ontological naturalism. For instance, while MacArthur defines the ontological claim of naturalism in terms of *commitment to only those things that are the objects of successful scientific inquiry*, he defines the methodological claim as “the only genuine and irreducible form of knowledge or understanding is that resulting from the methods of inquiry of the successful sciences” (2010, p. 125). Steve Clarke defines naturalism as involving a primary commitment to scientific methodology and to the idea that any naturalistic ontological commitments must be compatible with this primary commitment (2009, p. 127). What is implied in

these definitions is that the methodological claim is a necessary precondition for the ontological.

However, there is disagreement among naturalists on whether the methodological claim applies to all cognitive endeavours. Consequently, I discuss the position of naturalists who insist on the use of scientific methods alone. I call this *radical methodological naturalism*. I also discuss the position of those who defend the usefulness or relevance of some non-scientific methods. I call this *moderate methodological naturalism*. Rather than evaluating the plausibility of any of these classifications, my focus is on the extent to which we can understand what naturalism is all about from their respective positions.

1.4.1.1 Radical methodological naturalism and the problems concerning the idea of a unified scientific methods

Many naturalists claim that the methods of inquiry in the natural sciences are the only genuine sources of knowledge and understanding. Successful discovery of laws and the nature of nature are often cited as the reason for this claim. The effectiveness of scientific methods is often attributed to the use of explanations involving only natural causes and natural processes. Apart from the claim that only methods of science can give genuine and irreducible forms of knowledge, another claim often made about the success of science is that the methods of the natural sciences are applicable to all cognitive endeavours. For Akeel Bilgrami, naturalists claim that “there is nothing in the world that is not countenanced by the method of natural science” (2010, p. 2). This is a radical position. One consequence is that other non-scientific methods such as the use of analysis and intuitions in philosophy, are often regarded as non-empirical or non-scientific and consequently are regarded as incapable of leading to empirical truths about the empirical world (J. Dewey, 1925, pp. 1-36).

However, this view faces several problems. One is how to account for subject-matters that do not fall under the scope of sciences in a non-reductive or non-eliminative way. We have already discussed how naturalists are confronted with

the challenge of explaining non-empirical mathematical and abstract entities which are non-empirical (De Caro & Macarthur, 2010, p. 4). Consequently, I will not repeat the argument here. I only note the continued elusiveness of what naturalism amounts to.

Sheldon discusses a different problem confronting radical methodological naturalists- the vagueness of what are innocently called “scientific methods” and the “success of science” (1977, pp. 372-373). Sheldon meant that scientific methods are many and have different levels of success. Non-naturalists, such as Richard Rorty, have been noted for their arguments that there is no such thing as “scientific method”. According to a position credited to him by Wagner and Warner,

Scientists attack their problems using procedure tied to a specific context and theory. For example, a basic method in recursion theory is to try to reduce a question to the halting problem. A method of elementary mechanics is to ignore “small” forces, such as friction or the gravitational pull of distant stars. Such methods have no general application: it is nonsense to look for methods common to recursion theory, mechanics, and population biology. On the other hand, poets, historians, and bridge players have their context-specific methods, too. So, there is no useful distinction between scientific and non-scientific methods... Rorty would of course agree that designers of radio telescopes should not rely on poetry or commonsense physics. But on this view, science is just a set of beliefs and techniques used to solve certain problems.... Philosophical naturalism therefore makes no sense (Wagner & Warner, 1993, p. 5).

It seems there is no specific definition for “scientific methods” or succinct definition of what “science” is. Consequently, it is arguable that merely stating that naturalists recommend the adoption of the methods of science, does not provide a clear-cut explanation of what naturalism is. I now discuss moderate methodological naturalism.

1.4.1.2 Moderate methodological naturalism

Moderate methodological naturalists rate the methods of science as more successful than other methods of inquiry. Consequently, many of them recommend that certain tenets in the methods of science be incorporated into other modes of inquiry such as philosophical methods. Emphasis has been placed

on the advantages of the empirical nature of scientific methods in terms of repeatable testability and the advantages inherent in the experimental aspect of the scientific methodology (J. Dewey, 1925, pp. 1-36). However, what makes this position moderate is the contention that some non-scientific methodologies are nonetheless indispensable in certain subject-matters such as meaning, God (and other supernatural entities), moral facts and values, because the use of scientific methods (such as observation, experimentation or repeatedly testing or falsifying hypothesis) are not applicable. Bunge describes naturalists admitting such limitation as weak methodological naturalists (2010, p. 101).

How useful is this version of naturalism? Firstly, I argue that it fails to shed light on the difference between naturalism and anti-naturalism. For instance, while naturalist philosophers such as Goldman (1993a), Kitcher (2002), and Kornblith (2014a) admitted that both a priori and scientific methods are relevant in philosophical investigations because it has both scientific and non-scientific subject-matters¹⁰, Roy Bhaskar contended that positing “a cleavage in the method between the natural and social sciences” and grounding it “in a differentiation of their subject-matters” points to an anti-naturalist tradition (1998, p. 1).

The contention is that if moderate methodological naturalism admits that other non-scientific methods can be used along with the adopted methods of science, we need to ask: To what extent can non-empirical methods be used in a naturalistic philosophical investigation without compromising the naturalistic stance? Also, which method is better in situations where the use of non-scientific methods (such as analysis) leads to answers that are incompatible with science? A position stating that both scientific and traditional methods of philosophy are both

¹⁰ For instance, Goldman argues that the methods of science (empirical investigation and experimentation) are indispensable in establishing how our belief-forming processes produce beliefs that are true and a priori method of analysis is indispensable in determining how reliable these processes are (Goldman, 1993a, 1993b).

indispensable in philosophical investigations seems to imply that there are subject-matters in philosophy that methods of science are inadequate to solve.¹¹

In addition, philosophers, such as Donald Davidson, have been categorised as anti-naturalist (or non-naturalist) for arguing that normative element is irreducible to human disposition and causal tendencies (Bilgrami, 2010, pp. 31-32).¹² However, Davidson's consistent preoccupation with causal explanations shows that he is comfortable with applying some scientific methods and paradigms in solving some philosophical problems.¹³ The suggestion is that one does not need to be a naturalist to recognise or admit the usefulness of scientific methods.

It is at this point that turning to Dewey's version of naturalism is instructive. Dewey is in agreement with the idea that philosophical methods (such as dialectics, intuition, analysis) are inadequate for a naturalist and empiricist account of the knowledge of the empirical world.¹⁴ At best, he believes that these methods can be heuristically useful at the preliminary stages of investigations. However, he does not agree that only scientific methods can lead to truths about the world. He agrees that scientific methods of experimentation provide the paradigm for what he calls objective or cooperative investigations or inquiries (J. Dewey, 1925, p. 28). However, in his acknowledgement of the fact that not all subjects of inquiries can be approached through laboratory investigations, he endeavoured to establish a method that is consistent with his naturalistic tenets, which he called denotative empirical method. Dewey's introduction of the denotative empirical method enhances the possibility of a metaphysics that is substantive and at the same time,

¹¹ One of the ways used to draw the line between science and epistemology (and presenting the former as independent of the former), is stating that the former is essentially descriptive and the latter is essentially normative, and there is no way we can derive the normative from the descriptive (Kim, 1994; Stroud, 1985).

¹² James Pearson also contrasted Davidson with Quine by describing the position of the former as *Humanism* and the latter as *Naturalism*. He argues that their differences are irreconcilable (Pearson, 2011). I will not discuss his arguments here.

¹³ For instance, he was preoccupied with how *thinking* can cause, without embracing Cartesian dualism, a position usually described as "Anomalous Monism" (Davidson, 1992).

¹⁴ Dewey focused on this argument in the first chapter of *Experience and Nature* (J. Dewey, 1925, pp. 1-36).

complements science rather than being a rival. I discuss this method in detail in Chapter three under Dewey's naturalistic epistemology.

Dewey rejects the supposed contrast between naturalism and common sense. In seeing all human cognitive endeavours as actuated essentially by problematic situations¹⁵ and recognising their instrumental framework and purpose, he defines both science and common sense as "transaction". Firstly, he presents the idea of a symbiotic relationship between man and nature which refutes the notion of dualism between man and nature.¹⁶ It also indicates that activities from either make both undergo what Dewey calls a *change of locus* (J. Dewey & Bentley, 1949, p. 270). For instance, a mutual change of locus takes place when human pollution causes climate change and climate change necessitates new human adaptational needs. Secondly, "transaction" is used more profoundly to portray the idea that all human cognitive efforts (science, common sense, arts, magic and so on) and all social institutions (religion, societies, and so on) "express nature exuberantly" (J. Dewey, 1925, p. 51). These are fundamental naturalistic theses in Dewey's philosophy. Specifically, on common sense and science, he writes,

The discussion that follows is appropriately introduced by saying that both common sense and science are to be treated as transactions. The use of this name has negative and positive implications. It indicates, negatively, that neither common sense nor science is regarded as an entity – as something set apart, complete and self-enclosed. ... Positively, it points to the fact that both are treated as being marked by the traits and properties which are found in whatever is recognized to be a transaction: a trade, or commercial transaction, for example (J. Dewey & Bentley, 1949, p. 270) .

The suggestion is that science and common sense are both modes of inquiry, although scientific knowledge is qualitatively superior and noted for incomparable

¹⁵ For Dewey, the word "problematic" covers variety of occasions for inquiry. It covers situations "designated by such adjectives as confusing, perplexing, disturbed, unsettled, indecisive; and by such nouns as jars, hitches, breaks, blocks – in short, all incidents occasioning an interruption of the smooth, straightforward of course of behaviour and that deflect it into the kind of behaviour constituting inquiry" (J. Dewey & Bentley, 1949, p. 315).

¹⁶ This symbiotic relation is often described by Dewey as human 'transaction within nature'. Ontologically, it means that human beings are parts of the constituents that make up what we called 'nature'. Epistemologically, transaction refers to "the history of the knower as himself developed and known within the known cosmos of his knowledge"(J. Dewey & Bentley, 1949, pp. 136-137). My contention is that no dualism is implied in the use of this concept.

records of success. What these modes of inquiry have in common, however, is that, while each may address different questions, both ultimately originated from “interaction into which living creatures enter in connection with environing conditions” (J. Dewey, 1991, p. 118) and are ultimately characterised with the goal of how to understand and control nature.¹⁷ As rightly noted by Ronald Tobey, Dewey’s philosophical assumption is that “scientific method was only a more refined version of the common man’s method of thinking and the objects of science (such as atom and photons) were of the same kind as objects of common sense (shoes, cabbages)” (1971, p. 131).

One fundamental point to be noted is that Dewey’s naturalist conception of science is different from what we have seen in previous naturalist positions. The difference is deeply rooted in Dewey’s identification of the origin of all human cognitive endeavours in some problematic human encounters with nature or in nature. (I discuss this view further in chapter four under Dewey’s naturalistic notion about science). Generally, Dewey’s focus on the conception of man as an inseparable part of nature necessitates huge differences between Dewey’s naturalism and other versions we have considered so far. His naturalism has been described as humanistic naturalism (Bupp, 2001). I now turn to discuss some views of naturalists on the normativity of epistemology and the problem of scepticism. The purpose is to see how they can shed light on what naturalism is.

1.3.2 Naturalism and the problem of normativity and scepticism in epistemology

In this section, I consider views presented by some naturalists on two problematic issues in epistemology- normativity and scepticism. The question about normativity is related to scepticism in terms of how the former (theories of justification) are regarded as providing solutions to the latter (scepticism or doubt about discovery of knowledge). Attention will be on how some naturalists (such as

¹⁷ Explaining the difference between common sense and science in *Logic: The Theory of Inquiry*, Dewey writes that “the difference between them resides in their respective subject matters, not in their basic logical forms and relations, that the difference in subject-matters is due to the difference in the problems respectively involved, and finally, that this difference sets up difference in the end or objective consequences they are concerned to achieve” (J. Dewey, 1991, p. 118).

Quine in his project of naturalizing epistemology) address these issues. Their positions will be contrasted with the positions of some mainstream philosophers on one hand, and Dewey's position on the other hand. The purpose is to examine the extent that views on these specific epistemological problems can provide more detailed understanding of what naturalists are committed to.

Several philosophers have argued that the preoccupation of epistemologists is essentially that of exposition and defence of theories of justification of our beliefs (Goldman, 1993b; Kim, 1994; Kornblith, 1983; Stroud, 1985). The main idea behind this is the contention that epistemology is essentially a normative discipline. For Mario De Caro and David Macarthur, "normativity concerns what we should or ought to do and our evaluations of things and states of affairs" (2010, p. 1). One significance of seeing epistemology as essentially normative is that the feature is often used in contrasting discipline with the sciences as disciplines which "describe how things are, particularly the causal powers or causal regularities that exist in the world" (De Caro & Macarthur, 2010, p. 1). Another significance of a normative epistemology (for traditional epistemologists) is that a discipline committed to the establishment of norms is important to convince sceptics that the attainment of knowledge is possible. Consequently, epistemology is considered a discipline preoccupied with looking for necessary and sufficient conditions for knowledge.

If naturalism is identified as a theory about human knowledge, how is the concept of normativity accounted for in naturalism? What is the naturalistic attitude to scepticism? De Caro and Macarthur consider the challenge of normativity a concern for naturalists when they write:

... If one follows modern Scientific Naturalism in supposing that natural science, and only natural science, tells us what there is in the world, then there seems to be no room for the existence of normative facts-or at least this will be so insofar as they cannot be reduced to the kinds of objective, causal facts with which natural science deals (De Caro & Macarthur, 2010, p. 1).

The challenge posed in the passage is that if norms are irreducible to causal facts, then they are either phenomena that scientific methods cannot address or they are outside the scope of science. Thus, if the phenomenon of norm or justification

is irrelevant to science, how are scientific truths granted? This will be a challenge to any naturalism that presents the ontology of science as complete.

In Quine's *naturalized epistemology*, the impression he created is that *naturalizing* epistemology does not affect its normativity. For him, the normative concern continues:

The relation between the meagre input and torrential output is the relation that we are prompted to study for somewhat the same reasons that have prompted epistemology; namely, in order to see how evidence relates to a theory, and in what ways one's theory of nature transcends any available evidence (Quine, 1994a, p. 25).

Quine's point is that a naturalist is worried about how human theories or claims (which go beyond stimulation of nerves) can be justified by available evidence. Toward this end, naturalism encourages epistemologists to regard the theory of how our sensory receptors are stimulated as the only evidence for our theories of knowledge (1994a, pp. 25-26). Put differently, the truth of our judgements (our awareness of these stimulations) are to be verified through what science reveals about these nerve endings. This is a reversal of the traditional position in which stimulations of the senses are regarded as "unconscious data" and consequently non-verificational. For instance, conscious three-dimensional apprehension takes priority over two-dimensional reception (Quine, 1994a, p. 26). Thus, for Quine, naturalizing epistemology indicates the replacement of traditional methods of justification by a priori rules with scientific modes of justification.

The naturalistic philosopher begins his reasoning within the inherited world theory as a going concern. He tentatively believes all of it, but believes also that some unidentified portions are wrong. He tries to improve, clarify, and understand the system from within. He is a busy sailor adrift on Neurath's boat (Quine, 1981, p. 72).

In addition, unlike some traditional epistemologists who have argued that epistemology arose as a response to the universal sceptics who claimed that knowledge is impossible and consequently strive to refute the sceptics by trying to establish foundational beliefs (Chisholm, 1977; Hamlyn, 1970), naturalists, such as Quine, see this particular traditional concern as reification of sceptical doubt or

challenge (1994a, p. 20). Demanding justification, Quine argues, is a normal practice in any scientific inquiry:

For we can fully grant the truth of natural science and still raise the question, within natural science, how it is that man works up his command of science from limited impingements that are available to his sensory surfaces (Quine, 1974, p. 3).

Here, Quine's point is that science provides the "foundation" or the starting point for any inquiry about knowledge. Consequently, his contention is that the idea of challenging or doubting the possibility of knowledge in general is absurd. However, he admits that there is possibility or legitimacy of "self-doubt within science" (Quine, 1974, p. 3). This self-doubt in science, however, does not go beyond self-censorship or self-questioning for reassurances. Genuine doubts could emerge when one starts thinking about the possibilities of errors such as sensory illusions, the exactness of some experimental operations and so on. For him, these are procedural challenges that necessitate the need for science to "defend itself from within". As rightly noted by Michael Williams, the doubts or sceptical challenges recognised by Quine are those that come to light in the process of or as consequences of scientific inquiry (1996, p. 305).¹⁸

Here, two points are important. First, with epistemology naturalized, the notion of normativity or intelligibility in science, governed by natural laws becomes the arbiter of truth. In effect, there is no need for the a priori or non-scientific starting point¹⁹ that foundationalists in traditional epistemology were busy searching for, arguably without success.²⁰ Secondly, a naturalist epistemologist is a fallibilist. Like traditional epistemologists, his target is to attain truth and avoid error.

¹⁸ However, one can wonder, as Michael Williams did, how sceptical reasonings that do occur in the course of finding in experience some recalcitrant examples that force one to modify one's theory and approach can possibly be the same as "the kind of reasoning that would lead one to think that nothing we believe is ever so much as justified" (Williams, 1996, p. 305). However, I will not address this challenge to Quine here.

¹⁹ The argument is that there will be circularity if science justifies its claims internally (for instance, justifying perception by referring to scientific claims about the functions of human eyes and brain).

²⁰ The common theme in foundationalism is that there are some beliefs that are epistemologically more secure or justified than the others and, consequently, are important as evidence for other less-secured beliefs. These secured beliefs are called basic beliefs. There are many versions of foundationalism based on the degrees of security attributed to these basic beliefs (Chisholm, 1980; Goldman, 1993b; Kornblith, 1985).

Several arguments have been raised against “naturalized epistemology” in contemporary epistemology. One of the most prominent is that epistemology cannot be naturalized because it is essentially justificatory while science is essentially descriptive. More important, “norms” are regarded as creations of sentient human beings and consequently not part of nature. For instance, it does not make sense to ask if the radiation of the retina or the stimulation of nerves is justified, ought to be so and so, or not. On the other hand, any norm-related phenomenon needs a conscious human being to determine necessary and sufficient conditions for its attainment and more importantly, to ascertain when those conditions are met. If epistemology is essentially normative, the argument goes, then a naturalist has a field of study on his hands which is beyond his naturalistic approach. Critics like Kim, Stroud and White have argued that epistemology without norms is epistemology in name only. Writing about how the norm-consciousness of traditional epistemology cannot be captured in a naturalized epistemology, Kim writes:

It is an essential part of the business of naturalized epistemology, as a theory of how beliefs are formed as a result of sensory stimulation, to find out what particular beliefs the given cognizers have formed. But this is precisely what cannot be done, if our considerations show anything at all, unless the would-be naturalized epistemologist continually evaluates the putative beliefs of his subjects in regard to their rationality and coherence subject to overall constraint of the assumption that the cognizers are largely rational. The naturalized epistemologist cannot dispense with normative concepts or disengage himself from valuation activities (Kim, 1985, p. 41).

The point Kim is making here is that theories about *how beliefs are formed* are different from theories about *how beliefs are justified*. Although Kim will agree that the two processes are not mutually exclusive, yet, the latter, which is the preoccupation of epistemologists, is not reducible to the former. More importantly, Kim’s argument is that naturalized epistemology takes the *rationality of the epistemic agent or knowing subject for granted and consequently begs the question about whether knowledge is possible* or not, while traditional epistemology does not. Let us consider these four statements:

(1) Water boils at 30 degrees centigrade.

(2) Anything that goes up without support must come down

(3) You ought to know that you need a warm house to survive winter

(4) I know that Wellington is the capital of New Zealand because I have been there.

Kim's argument is that statements 1 and 2 are descriptive while statements 3 and 4 are normative and evaluative. Statement 3 presupposes that there is a particular way (which is the right way) of doing x which the agent is capable of doing because "ought" implies "can". Statement 4 is a variation of statement 3 in the sense that the "right to know" has a corresponding duty to prove or justify. Kim's conclusion is that if the statements and subject matter of naturalized epistemology are radically different from what obtains in traditional epistemology, it makes no sense to see the two as rival solutions to the same problem or to see one as reducible to the other. If naturalized epistemology is really an epistemology, his contention continues, a separate theory of normativity must be provided by the naturalist epistemologist.

However, some naturalists have responded that a thorough-going naturalistic account of knowledge needs no (separate) theory of justification outside the scientific system for the establishment of truth. Some of these philosophers have defended this claim on the ground that the concept of justification, like science, is descriptive (Janvid, 2004, p. 40). Others have defended the claim on the ground that the concept of normativity (like some notions in philosophy such as consciousness, mind, value, and so on) has been naturalized (Maffie, 1990, p. 10; 1995, p. 10). His argument is that if "normativity" is all about how to ascertain proof or validation for a claim, then science has it in its methodologies and empirical validations.

In addition, some scholars such as De Caro, David Macarthur, and Barbara Trybulec have described traditional notions of norms as unrealistic or obsolete. Trybulec argues that "naturalism should satisfy its own standard of valuable, rational beliefs and it has nothing to do with mysterious, infallible and a priori sources" (2008, p. 26). De Caro and Macarthur write that:

... Any form of naturalism will be opposed to Platonism about norms, where this is understood as the view that normative facts hold wholly independently of human practices (say, of reason giving) and are, as it were, simply there anyway to be discovered. For similar reasons, it will be opposed to a Moorean non-naturalism that holds that our access to normative facts is by way of a *sui generis* epistemic faculty of intuition directed at just this kind of fact (Caro & David, 2010, p. 3).

The point that these philosophers are making is that the concept of a norm in traditional philosophy has been reified in such a way that it has become an abstract phenomenon like Plato's "Forms", "The Good" or imaginary self-sustaining objects like "Mermaid", "Pegasus" or the "philosopher's stone". What a naturalistic philosopher is expected to do is to reconceptualise this concept to reflect the product of natural human affairs.

I think Dewey's naturalism raises some challenges against Quine's version of naturalism, specifically, his naturalizing project.²¹ Before discussing these challenges, I will discuss three points on which their positions are compatible. Firstly, Quine's identification of the nature-human contact as the basis for his naturalism is compatible with Dewey's position. Dewey's calls this the nature-human symbiotic relation. In addition, Quine's naturalistic "strategy", the necessity of dislodging "first philosophy" for naturalism to take off, is also compatible with Dewey's view about the need to reject transcendental metaphysics. The third point is Quine's contention that, as far as naturalized epistemology is concerned, sceptical doubt is an internal problem, within the operations of science. Dewey is also against what he called "pathological doubt". Dewey contends that, our genuine sceptical doubts are consequences of failures in our previous experimentations which increase our yearning for more pragmatically successful methodologies and theories. These ideas are discussed in detail in chapter 3.

I will now state their disagreement on those three points. First, Quine's distinction between the "meagre input" and the "torrential output", and more specifically,

²¹ There are several instances where Quine and Dewey have mutual agreement on some framework on naturalism. A good example is their reservations on the plausibility of regarding knowledge as a natural kind, based on their critique of essentialism (J. Dewey, 1991, p. 295; Quine, 1994b). I discuss this point in chapter 7.

his contention that the “input” is all the naturalized epistemologist has to begin the construction of his theory is not compatible with Dewey’s position. This position contradicts Dewey’s naturalism in the sense that it is based on a dualist ontology in which human and nature are regarded as distinct and separable. Dewey regards the “input” from nature and the “output” from the human species as transaction or symbiotic relation where both situations are only meaningful when treated as mutually entailing. This is one of the essences of Dewey’s metaphysics.

Incidentally, Dewey sees this “metaphysics” as providing the road map for epistemological investigations. A naturalistic epistemological investigation begins during finding solutions to problematic situations that ensue during the “natural transactions”. In this sense, naturalism need not dislodge epistemology from its metaphysical foundations, challenging Quine’s preoccupation with replacing the metaphysical foundation of epistemology with psychology and linguistics. Specifically, Dewey is against the presentation of metaphysics as essentially antithetical to science. I discuss Dewey’s view on how metaphysics can provide the road-map for epistemology and science in chapters 2 and 3.

1.4 Chapter summary

This chapter focused on naturalism. Given that naturalism is generally believed to be a philosophical position, this chapter aimed to identify a version of naturalism that unambiguously and substantively defended this claim. The chapter articulated Dewey’s version of naturalism and showed how it provided a rich framework for naturalism and how it met some challenges that other versions of naturalism are inadequate to resolve.

The chapter started by considering naturalism as an anti-philosophical, non-philosophical or non-substantive philosophical position. I considered Moore’s critique of naturalist approaches to the identification of moral facts, Santayana’s objection to Dewey’s naturalist metaphysics and critics’ rejection of Quine’s proposal to develop a naturalized epistemology. In my assessment, I concluded

that these philosophers were only against some versions of naturalism. In section two, I discussed naturalism as a rejection of supernaturalism. While this view appears to be a less controversial understanding concerning what naturalism is, I observed some problems. For instance, I considered how Dewey's rejection of natural/supernatural bifurcation shed more light on what naturalism is. I explained Dewey's rejection as a consequence of his rejection of dualism which he attributed to a non-naturalistic metaphysics. For him, the distinction between natural and supernatural is arrived at through a priori reasoning and conceptual analysis. On this point, it is dialectical rather than being empirical and experimental. The distinction is consequently superficial and artificial. Alternatively, naturalism necessitates focusing on what he calls "the inclusive integrity of experience". For him, this focus reveals that man is part of nature and that all his experience: esthetical, intellectual, moral, social, cultural, religious, and so on, emanate from the symbiotic relations with nature. Consequently, questions about what is material or non-material, physical or transcendental, become moot.

In section three, I considered naturalism essentially as a physicalist position. This consideration is one of the consequences of philosophers' acceptance of the credibility of the ontological account of science, according to which physics and its physical theories appeared to be the image of science. I considered how metaphysics will become impoverished by becoming a monistic theoretical position- if physicalism defines naturalism. However, given that there are many disciplines in science, I considered different ontological accounts, ontology according to micro-physics, ontology in biological sciences and human sciences. I explored the possibility of physicalism being a consensus in all the sciences as problematic. Consequently, I was able to establish that physicalism (in its eliminative or reductionist forms) cannot provide an acceptable analysis of naturalism. I considered Dewey's views about science and found a version of naturalism that does not involve reduction or elimination, either of one science to the others or philosophy to science. I discussed Dewey's naturalist metaphysics which presents all human cognitive endeavours as essentially problem-solving and instrumental. I also discussed how this view avoids the problem of choosing the

ontology that represents all sciences. There is only one ontological account: metaphysics. This is defined as a comprehensive account of human transaction which provides the base for a more technical scientific ontology. However, given the instrumentalism that occupies the centre-point of Dewey's naturalism, I discussed his choice of engineering technology as the image of science.

Finally, in section four, I considered some naturalists' views about what a naturalist epistemology should look like in terms of methodology and topics. I started with the question concerning the appropriate method(s) for philosophy. I considered the views of some naturalists who believe that a naturalist epistemology has only the methods of the sciences to appeal to in epistemological investigations- radical methodological naturalism. I found this position problematic because it seems to involve reductionism or eliminativism, both ontologically and methodologically, because there is a tendency to abandon non-scientific methods. This makes the consideration of moderate methodological naturalism seemingly more attractive. However, there is a question for a moderate naturalist, who either recognises other methods and/or, perhaps, recognises other non-scientific subject-matter: To what extent can this moderate position be sustained without becoming "half-hearted" naturalism? I found this question a significant challenge to moderate naturalism. It is at this point that I turned to Dewey's version of naturalism and the advantage it has over other versions, by developing a method that is distinct from scientific methods and which complements scientific methods by prioritising the empirical and experimental tenets of science.

Chapter Two

The nature and scope of Dewey's naturalistic metaphysics

2.0 Introduction

In this chapter, I extend the exploration of Dewey's naturalism from the general analysis of its tenets sketched out in the previous chapter, to how those tenets play out in terms of providing answers to some general and specific problems that philosophers are preoccupied with in metaphysics. The problems I explore include his naturalistic views on issues such as the nature of reality and human experience and the human mind. From his naturalistic positions on these specific issues, his positions on more general issues were derived, such as: defining the scope, methodology and goals of metaphysics. For instance, I explore how his position engenders a conception of an empirical metaphysics that: (i) serves as the "foundation" of theories of knowledge and (ii) complements science. I discuss how this "foundational role" ascribed to naturalistic metaphysics by Dewey is significantly different from the foundational roles usually ascribed to the "first philosophy" or traditional metaphysics. I also explore how he appeals to evolutionary theories in developing an instrumentalist conception of all human cognitive endeavours (science, metaphysics, epistemology, logic, and so on).

I start the chapter by noting many interpretations or assessments of Dewey's position on metaphysics, most of which are incompatible with each other. At one extreme, we have the self-proclaimed apologist, Rorty, who argues that Dewey's position is an explanation of why nobody needs a metaphysics rather than itself a metaphysical system (Rorty, 1982, p. 72). Thus, following Rorty, the suggestion is that we can categorize Dewey with philosophers like Hume, Kant and the positivists who have described metaphysical discourse as useless, impossible and meaningless, respectively. At the other extreme, we have critics like Santayana and Scott who argue that although Dewey was interested in constructing a substantive metaphysical system, he was not successful. Scott interprets Dewey's naturalist metaphysics as an attempt to see Hegel's radical idealistic philosophy

from an empiricist perspective. Consequently, he describes his work as a naturalized Hegelianism (Scott, 2010). Santayana, on the other hand, argues that Dewey's idea of a naturalistic metaphysics is a contradiction (1951). For other critics, Dewey's metaphysics is a failure because it does not address the questions about existence that philosophers like Plato, Aristotle, Kant and Descartes regarded as the most important questions in metaphysics (Cohen, 1931, p. 196; B. Russell, 1939, p. 139; Santayana, 1951). Between these extreme positions, we have philosophers such as Shook who argue that Dewey's naturalistic metaphysics offers a new method of doing traditional metaphysics (Shook, 2004).

Consequently, the focus of this chapter will be on how Dewey's position on metaphysics can be understood. Is he offering a new metaphysics or attempting to reconstruct traditional metaphysics? In answering this question, I take a cue from suggestions made by Santayana and Piatt, one of his critics and one of his apologists, respectively. Santayana observes that whatever Dewey aimed to contribute to philosophy through his version of metaphysics was rendered obscure or muddled by his half-hearted and "short-winded" naturalism. For him, the naturalist metaphysics that Dewey aspired to is impossible (1951, p. 253). In Piatt's observation, "much of the difficulty in understanding Dewey would be obviated if more attention were paid to his naturalism and less to his empiricism" (1951, p. 107). However, Shook has a different opinion about Dewey's naturalism. He contends that his later thought "elaborated a thoroughgoing naturalism" (2000, p. 7). The cue from these scholars is that everyone seems to agree that naturalism is at the centre of Dewey's philosophy. However, it must be noted that Dewey's critics and apologists have interpreted and assessed his philosophy based on the particular version of naturalism they subscribed to.

On Dewey's naturalist metaphysics, I explore the differences and similarities between his version and traditional metaphysics. On differences, I focus on two ways he redefines the relationship between metaphysics and science in particular and between metaphysics and other human cognitive endeavours in general. For instance, Dewey claims that science and metaphysics have only nature as their subject-matter and consequently rejects the demarcation between traditional

metaphysics and science. Secondly, in his rejection of the notion that metaphysical knowledge is a priori, Dewey introduces what he calls denotative empirical methodology to facilitate empirical and naturalist metaphysical investigations. From this conception, Dewey envisages a metaphysics that complements rather than rivals science. I also discuss his claim that metaphysics provides the ground-map for epistemology- a claim that emphasises his view that these areas in philosophy are inseparable.

On the similarities between his version of metaphysics and traditional metaphysics, I discuss Dewey's preoccupation with some concerns of traditional metaphysics; such as trying to answer questions about the nature of reality, experience and human nature. I will call this "the continuity thesis". In addition, I explore some similarities between Dewey's metaphysics and the project of traditional philosophy known as "first philosophy". Dewey identifies the subject-matter of his metaphysics (the study of the human-nature transaction and what he calls generic traits of existence) and contends that his naturalist metaphysics serves as the foundation of science (in fact, of all human cognitive endeavours). Philosophers such as W.V.O. Quine and Penelope Maddy have interpreted the traditional construal of Metaphysics as "first philosophy" in terms of a firm foundation sought for science (Maddy, 2007; Quine, 1994a). Consequently, it is important to know how Dewey's naturalistic metaphysics is different from the "first philosophy", which has been construed by many scholars as anti-science. It is also important to know how the "continuity thesis" is consistent with the suggestion that Dewey's naturalist metaphysics is radically new.

This chapter has two sections. In the first section, I discuss Dewey's naturalist conception of human experience. I discuss how Dewey explores the primary and non-cognitive aspect of human experience as the subject-matter of his naturalist metaphysics in *Experience and Nature*. I compare his conception and analysis of "experience" with the traditional accounts offered by philosophers such as Locke and Russell. In the second section, I discuss how Dewey's notion of naturalism and subscription to evolutionary theory influenced his notion of reality. I discuss his conception of a dynamic and multi-faceted reality as well as his theory of generic

traits of existence. I compare his account of reality with the popular accounts in metaphysics exemplified by Platonic Forms, Aristotle's Substance, Kant's Noumena and Descartes' mind/body dualism. In discussing Dewey's naturalist ontology, I pay specific attention to his argument that both realists and idealists are wrong in carving nature into two opposing aspects: human/nature, mind/body, subject/object, and reality/ appearance. In addition, I examine Dewey's naturalistic metaphysics in the light of three popular and orthodox realist positions, naïve realism, metaphysical realism and scientific realism. The chapter establishes that Dewey's position transcends the claims made by the adherents of these positions. Finally, I step back and examine the overall consistency of Dewey's theories of experience and reality in reference to claims of critics such as Gales, Santayana and Murphy that these theories are mutually inconsistent.

2.1 Dewey's naturalist account of human experience

In this section, I explore Dewey's conception of the nature of human experience. I will start by exploring how his theory of experience is a radical challenge to traditional accounts of experience in terms of a mode of knowing characterised by subjective and sporadic events. I explore two explanations he offered for the traditional misconstrual of Experience. The first is that the traditional notion of Experience is based on wrongly construing it as synonymous with perception or awareness. The second is that the traditional conception of Experience is a consequence of a non-naturalist theory of existence or reality that *alienates* the human species and their experience from nature.

On the constructive side, I discuss Dewey's analysis of experience as "a double-barrelled word" (J. Dewey, 1925, p. 10). I explore his explanation of this double-barrelledness in terms of how two distinctions can be made within experience, as human encounter with nature. Firstly, the distinction between "primary" and "secondary" experience. Secondly, the distinction between the *process of experiencing* (epistemological sense of experience) and what I call "the transactional sense of experience" (metaphysical or ontological sense of

experience)²². I discuss the rationale behind these distinctions in terms of Dewey's three contentions. Firstly, that experience is not only a mode of knowing. It is also a mode of existence. Secondly, that a naturalist account of human experience is a pointer to how a naturalist metaphysics is possible. Thirdly, that such a naturalist account invariably will point at nature (in its entirety) as the only subject-matter for both science and metaphysics and that this is one of the reasons why he anticipates a naturalistic metaphysics that complements science rather than being a rival to it. I start the discussion with Dewey's rejection of the conception of experience as exclusively a mode of knowing- a position he regarded as prominent in traditional philosophy.

2.1.1 Dewey's rejection of the traditional conception of human experience as only a mode of knowing

The very first warning that Dewey issues in *Experience and Nature* is that one may fail to understand his naturalistic metaphysics if the way he used some concepts in ways that are radically different from their usual signification in traditional metaphysics is not understood. The most fundamental among these concepts is *experience* (1925, pp. 1-5). Writing about experience was misconstrued in traditional philosophy, Dewey writes:

Experience, they say, is important for those beings who have it, but is too casual and sporadic in its occurrence to carry with it any important implications regarding the nature of Nature. Nature, on the other hand, is said to be complete apart from experience. Indeed, according to some thinkers the case is even in worse plight: Experience to them is not only something extraneous which is occasionally superimposed upon nature, but it forms a veil or screen which shuts us off from nature, unless in some way it can be "transcended." So something non-natural by way of reason or intuition is introduced, something supra-empirical...One can only hope in the course of the whole discussion to disclose the meanings which are attached to "experience" and "nature" (J. Dewey, 1925, p. 1).

²² An objection can be raised that this distinction is not tidy enough on the ground that the process of knowing is also transactional in the Deweyan sense. However, the point of the distinction is based on Dewey's contention that experience is more encompassing than a model of knowing. While Dewey is not drawing a rigid demarcation between these two distinctions (just as he does not between epistemology and metaphysics), his distinction between cognitive and non-cognitive experiences makes it clear that these aspects are still distinguishable.

According to him, in traditional philosophy, experience was regarded as a phenomenon outside nature or some kind of subjective consciousness that is inherently relative to individuals and some particular circumstances or contexts. Consequently, it is usually designated as unempirical and immaterial. More importantly, it is regarded as non-natural, in the sense of being distinct from natural processes such as the functioning of human biological systems. Dewey identifies three reasons for this (mis)conception. Firstly, Experience was widely associated with perception which in turn was seen as a private or subjective affair or phenomenon. For instance, experiencing an object (such as a chair in a corridor) is typically interpreted to mean awareness of the primary and secondary qualities of chairs such as colour, weight, hardness and so on. Secondly, “activities” involving perception or sensation of this chair are contextual because they occur intermittently. Thirdly, for traditional philosophers, imagining the existence of a world without an experiencing agent is logically possible. Consequently, a theory of reality emerged in which there is a distinction between what is experienced and the experiencing agents. Consequently, ontologically, experience was taken to be incidental.

How fair is Dewey’s description? I think Dewey was right in saying that both empiricists and idealists in traditional philosophy were wrong in their denial of the *natural* connection between “experience” and reality on one hand and in their failure to recognise that there is an ontological (in addition to methodological) connection between “experience” and knowledge. He is right that this erroneous conception of experience creates several pseudo problems for traditional philosophers. A good example is the question confronting the empiricists: If experience is the route to knowledge and experience is subjective, how is objective knowledge possible? A debate between two empiricists, W.T. Stace and A.J. Ayer, on the danger of relativism as a consequence of the subjective nature of human experience, brings Dewey’s argument on point. Stace writes:

I cannot experience anything except my own experience. I can see my red but I can never see yours. I can feel a pain in my leg. But I can never feel the pain in your leg. I can feel my emotions but not yours...I cannot see through your eyes nor you through

mine... All knowledge, all philosophy must be based upon experience... Therefore, all knowledge must have had its beginning in my self-enclosed personal experience. This original solipsism is utterly inescapable except by prejudice or refusing to see it (Stace, 1932, p. 67) .

Stace's argument is that, due to the subjectivity that is inherent in immediate experience, our ontological and epistemological accounts of the world must begin as a relativist's account. We may strive to reach a kind of inter-subjectivity later on, but the relative starting point is a human predicament. This problem arises because, according to him, what we call experience are our subjective reports about the external world. The implication is that there is a huge gulf between our experience of what nature is and human-independent Nature itself, that we cannot objectively cover. The force of his argument rests on his seemingly unassailable claim that it is impossible that the same experience should be part of the history of two separate selves.

In his rejoinder, Ayer disagreed with the premise and conclusion of Stace's position. For him, Stace's premise that personal or immediate experience is completely closed to objectivity is challengeable. For him, the problem (which he conceded to be genuine) lies in our human inability as language users to make the transition, linguistically, from the individual's "self-enclosed personal experience" to the "common social world". Experiences, according to him, are not only shared in varying degrees, but manifestations of other people's experiences such as pain are empirically observable and verifiable as well (Ayer, 1955, pp. 136-146). In addition, Ayer argued that Stace's conclusion inevitably involves a self-contradiction. If knowledge must necessarily originate from my self-enclosed personal experience and nobody else's, Ayer notes, then knowledge will not begin from anybody's personal experience since every individual will have equal obligation or right to the beginning of knowledge (1936, p. 145). From this debate,²³ we can summarise

²³ It is important to remark that my focus at this point is not to defend either side of the debate (between Ayer and Stace). What I intend by bringing it up is to state how the concept of experience was conceived in traditional philosophy and the problems that ensued. My focus is on the question what makes Dewey say that Experience as traditionally conceived is untenable? My interest is in what makes Dewey reject impressions, sense data or intuited essences as paradigmatic of Experience.

the basic features of experience as traditionally conceived as: (i) the word “experience” is exclusively a verb (ii) it was held to indicate subjective or relative reports about the world (iii) it was held to be outside of the fabric of nature. However, Dewey argued that this conception of experience is wrong.

In more recent times, phrases like ‘what it’s like’ has been popularly used, not only to express the subjectivity of experience (consciousness) but to qualify it as “phenomenal” or “queer”. In Nagel’s famous article “What is it like to be a bat”, the central argument is that human experience is subjective and mysterious. He compares human experience with the aural experiences bats get from their sonar, that he believes nobody can know unless the person is also a bat (1974, pp. 435-450). A similar position was held by Colin McGinn (1982).

A Deweyan response to Nagel’s conception of experience and the problems associated with it is that it came about as a result of “unempirical methods” used by philosophers that tore apart *the operations and states of experiencing* (1925, p. 11). Dewey argued that the error in the conception of experience that dominates the Stace/Ayer debate (and the traditional philosophy it stands for as proxy) was rooted in the notion that experience is nothing but perception. Using one unidentified empiricist philosopher to serve as a proxy for empiricists such as Locke, Russell and Hume who also have theorised experience as collections of atomic sensations or perceptions, Dewey writes:

To illustrate the nature of experience, an author writes: “When I look at a chair, I say I experience it. But what I actually experience is only a very few of the elements that go to make up a chair, namely the color that belongs to the chair under these particular conditions of light, the shape which the chair displays when viewed from this angle, etc.” Two points are involved in any such statement. One is that “experience” is reduced to the traits connected with the act of experiencing, in this case the act of seeing... The other point is that, even in such a brief statement as that just quoted, there is compelled recognition of an object of experience which is infinitely other and more than what is asserted to be alone experienced (J. Dewey, 1925, pp. 17-18).

Dewey’s contention here is that experience is not synonymous with perception. With perception and experience taken as synonymous, both are treated as phenomena that are subjective and occur sporadically and circumstantially.

However, for Dewey, there are aspects of having an *experience of a chair* that are more long-lasting than the sporadic process described as “perceiving a chair”. People sit on chairs and trip over them. There are also numerous activities in experiencing chairs that involve collective or shared activities among individuals; such as designing them. These instances point to the fact that experience is not identical with or reducible to perception. However, Dewey’s stronger argument is that “the utility of using chairs” (and other things) is a quality and as legitimate as sensible qualities such as weight and colours. More importantly, this utility, for him, is non-relational and consequently is *as natural as any of the sensible qualities cherished by the traditional philosophers*. For Dewey,

If we recognize that all qualities directly had in conscious experience apart from the use made of them, testify to nature’s characterization by immediacy and finality, there is ground for unsophisticated recognition of use and enjoyment of things as natural, as belonging to the things as well as to us. Things are beautiful and ugly, lovely and hateful, dull and illuminated, attractive and repulsive. Stir and thrill in us is as much theirs as are length, breadth and thickness. Even the utility of things, their capacity to be employed as means and agencies, is first of all not a relation, but a quality possessed; immediately possessed, it is as esthetic as any other quality (J. Dewey, 1925, p. 91).

Dewey’s point is that we can understand experience from an ontological standpoint in which it is depicted as the control and utilization of nature rather than merely perceiving it. This view is fundamental in Dewey’s description of human-nature symbiotic relations which he calls “transactions”. However, it must be noted that Dewey’s contention that “the utility of things” is a natural phenomenon (non-relational quality) is intended to establish a connection between his naturalist conception of experience and his naturalist conception of reality. Reality, to Dewey, is evolving. Experience, understood from the standpoint of control and utilization, expresses this dynamic and instrumental nature of reality. I discuss this view in detail in the section 2.2.

Consequently, in *Experience and Nature*, Dewey is preoccupied with distinguishing between the “process of experiencing” (in the sense of perception, awareness, which basically is epistemological) and the totality of experience (in terms of transactional relation, which Dewey sees as ultimately metaphysical or

ontological). Thomas Alexander put these notions in a good perspective when he writes:

For those who believe that “experience” must refer to some sort of immediate perceptual event causally arising from nature or for those who hold that the primary relation of experience to nature is determined in terms of knowledge, Dewey’s attempt to construct a metaphysics must appear to be incomprehensible and unnecessary. But when experience is understood from Deweyan standpoint, as involved, meaningful, and shared response to the world and to each other, the possibility of such project not only is recognized but is seen to be necessary. To keep experience from being taken in a subjective and reductionistic manner, one requires a theory which will maintain its situational and transactional features in full view (T. M. Alexander, 1987, p. xvii).

Alexander’s point is that mainstream philosophers were unable to understand how a metaphysics can be constructed from experience because they have an incorrect conception of experience and they started from a wrong question: How is knowledge possible from sporadic awareness or sensations classified as experience? Dewey was able to construct a metaphysics from his notion of experience because of his ability to articulate larger issues that serve as harbinger for the quest for knowledge. For the rest of the chapter, I will focus on these “larger issues” and examine how exploring them can produce a substantive metaphysics as claimed by Dewey and his apologists. I will start by discussing Dewey’s contention that questions and doubts raised against the idea that experience is part of nature are typically a philosophical problem caused by the use of unempirical methods and subscribing to unnaturalistic metaphysics.

2.1.2 Dewey’s contention of Experience as the subject-matter for science and philosophy

In *Experience and Nature*, Dewey was attracted by the conception of what experience is in science, and explored how to incorporate it into philosophy. Consequently, in *Experience and Nature* he juxtaposes the conception of experience in philosophy (where it is treated as an unnatural phenomenon) with the conception of experience in science (where Dewey believed it is accepted as part of nature). In his attempt to show that science provides justification for seeing experience as a substantive part of nature, Dewey writes:

In the natural sciences there is a union of experience and nature which is not greeted as a monstrosity; on the contrary, the inquirer must use empirical methods if his findings are to be treated as genuinely scientific. The investigator assumes as a matter of course that experience, controlled in specific ways, is the avenue that leads to the facts and laws of nature. He uses reason and calculation freely; he could not get along without them. But he sees to it that ventures of this theoretical sort start from and terminate in directly experienced subject-matter. Theory may intervene in a long course of reasoning, many portions of which are remote from what is directly experienced. But the vine of pendant theory is attached at both ends to the pillars of observed subject-matter (J. Dewey, 1925, p. 2).

From this passage, we can see that for Dewey, the manipulation of the material world is nothing over and above the manipulation of experience. The fact that “experience” *can be controlled in some specific ways* to create effects in the physical world, for Dewey, is a pointer to the fact that Experience is part of nature. “Experience” in this Deweyan sense is a noun and not a verb.²⁴ Considering further this noun-sense of “Experience”, Dewey writes:

If the empirical method were universally or even generally adopted in philosophizing, there would be no need of referring to experience. The scientific inquirer talks and writes about particular observed events and qualities, about specific calculations and reasonings. He makes no allusion to experience; one would have to search a long time through reports of special researches in order to find the word. The reason is that everything designated by the word “experience” is so adequately incorporated into scientific procedures and subject-matter that to mention experience would be only to duplicate in a general term what is already covered in definite terms (J. Dewey, 1925, pp. 5-6).

This passage suggests that Dewey believes that philosopher’s doubt or outright rejection of the possibility of experience being a part of nature has been rendered obviously false by its prominence in science. He contends that the unempirical methods used in philosophy contributed to how philosophers missed the true nature of Experience. Dewey argues that from the conception of experience in science, we can talk about nature as materials of experience which can be seen, touched and observed. We can refer to these materials in past, present and futuristic tenses. More specifically in science, the word “experience” is rarely used. The

²⁴ “Experience” in traditional philosophy was conceived verbally. For instance, in the statement “I experience X” in which “X” may be a pain-sensation.

reason is that it is regarded as a general term for a series of particular events and qualities that are observed. Again, Dewey writes:

We begin by noting “experience” is what James called a double- barrelled word. Like its congeners, life and history, it includes what men do and suffer, what they strive for, love, believe, and endure, and also how men act and are acted upon, the ways in which they do and suffer, desire and enjoy, see, believe, imagine- in short, processes of experiencing. ... It is “double-barrelled” in that it recognizes in its primary integrity no division between act and material, subject and object, but contains them both in an unanalysed totality (J. Dewey, 1925, pp. 10-11).

In this passage, Dewey advances from his initial argument that experience is a part of nature to a stronger one that it is “no infinitesimally thin layer or foreground of nature but that it penetrates into its depth”. His point is that there is an all-encompassing nature of experience that has been denied or overlooked by traditional philosophers. Consequently, he rejects the strict identification of experience with the physiological and psychological processes that characterise our awareness of the stimulation of our senses or sensory nerves and identifies another phase of interaction which involves social activities. These social activities cover the entire life and history of human species, activities such as religion, science, culture, and society. Dewey depicts the “private” and the “integrated” or social aspects of human experience in his distinction between primary and secondary experience. This is my focus in the next section.

2.1.3 Dewey’s distinction between primary and secondary experience

In *Experience and Nature*, Dewey distinguished between two aspects of human experience: the primary and the secondary. His aim was to demonstrate that experience is a process and that different stages in the process mark the distinction between the subject-matters of his naturalist metaphysics and his naturalistic epistemology. He writes:

That the subject-matter of primary experience sets the problems and furnishes the first data of the reflections which constructs the secondary objects is evident; it is also obvious that test and verification of the latter is secured only by return to the things of crude or macroscopic experience-the sun, earth, plants animals of common everyday life. But just what role do the objects attained in reflection play? Where do

they come in? They explain the primary objects, they enable us to grasp them with understanding, instead of just having sense-contact with them (J. Dewey, 1925, p. 7).

Again, he writes:

The distinction is one between what is experienced as a result of a minimum of incidental reflection and what is experienced in consequence of continued and regulated reflective inquiry. For derived and refined products are experienced only because of intervention of systematic thinking. The objects of both science and philosophy obviously belong chiefly to the secondary and refined system (J. Dewey, 1925, pp. 6-7).

Dewey's point is that there are two stages in human experience. The first stage is when sense-contacts with the world are made- when things in the world are had, used, and enjoyed. For him, some aspects of these actions or events, marking everyday human activities, may be sporadic or subjective. An example is an individual savouring a taste of an apple or enjoying a particular musical genre. The most important mark of primary experience, for Dewey, is *immediacy*- actions performed with minimal reflection. However, he noticed that these sense-contact experiences do not provide a comprehensive understanding of reality or how things are related as a whole. The incomprehensiveness is explained as an absence of informed, continued and regulated inquiries. This is the primary stage of the human experience which Dewey described as non-cognitive. The absence of detailed understanding in the primary experience, to address problematic situations, actuates the secondary experience. The secondary experience is distinguished by systematic thinking and continued regulated reflective inquiry. The cognitive secondary experience constitutes Dewey's naturalistic epistemology. This will be the focus of chapter three.

2.2 Primary experience and the construction of a naturalistic metaphysics

Two points are to be noted in Dewey's distinction between primary and secondary experience. First is his emphasis that the study of primary experience constitutes the subject-matter of his naturalistic metaphysics. The second point is that the subject-matter of metaphysics (primary experience) "sets the problems and furnishes first data for reflection which constructs the secondary objects". In

addition, test and verification of the secondary experience (science, philosophy) can be secured “only by return to things of crude or macroscopic experience”. This implies that primary experience plays the role of “foundation” for secondary experience, both by being prior and then by playing an evidential role.

In reference to primary experience, Dewey usually refers to these activities as “doing” and “suffering” (1925, p. 22) or “action-undergoing” (1925, p. 23). These are Dewey’s technical coinages meant to emphasise specific overt actions in which we humans go “experimenting and putting ourselves in the way of having our sense and nervous system acted upon in ways that yield material for reflection” (1925, p. 22). Consequently, these experimenting activities meant for “consummations” are contrasted with *mere activities* that Dewey usually refers to as “*disconnected doing*” or “*disconnected suffering*”. The difference between these two set of activities is that while the former are actuated by human needs and desires to adapt or readjust for survival, the latter are not. In addition, Dewey was able to show how these two aspects of experience are connected when he writes:

That the physiological organism with its structures, whether in man or in lower animals, is concerned with making adaptations and uses material in the interest of the life-process, cannot be denied. The brain and nervous system are primarily organs of action-going; biologically, it can be asserted without contravention that primary experience is of corresponding type. Hence, unless there is a breach of historic and natural continuity, cognitive experience must originate within that of a non-cognitive sort. And unless we start from knowing as a factor in action and undergoing we are committed to the intrusion of an extra-natural, if not supernatural, agency or principle (J. Dewey, 1925, p. 23).

In this passage one can see the fullness, compactness and organic complexity of experience in Dewey’s metaphysics. As rightly noted by Murphy, Dewey used his identification and analysis of the content of experience to demonstrate how experience is continuous with the rest of nature in that it is both a consequence of purely natural (physical, biological and social) interactions and also a fair sample of what natural events really are (1951, p. 219). For Campbell, this in-depth analysis of experience in Dewey’s work and its novel inclusion of content in terms of social interactions offers Dewey the opportunity to argue that experience is a

continuous natural phenomenon and not an equivalent of random encounter or transient passage as held by mainstream philosophers (Campbell, 1995, p. 70).

For Dewey, there are several interlinked traits that define the processes of experiencing and perception is just one of them.²⁵ Just as we perceive things, they are also enjoyed, endured, loved, hated and used. Second, Experience denotes interaction between organism and environment. In this interaction, Dewey laid emphasis on what we can call human agency. First, humans are naturally part of nature. In addition to being part of nature, human agency interacts with nature in a kind of symbiotic relation. Nature acts on him by impinging on or affecting his senses in certain ways. The human agent responds by acting on Nature as well, reforming or manipulating and controlling the constituents of nature. This is the hallmark of Dewey's naturalism. His naturalism describes experience as the product of environment-organism transactions.

Dewey strongly believes that with this symbiotic relation between Nature and human agency, in which humans act, simultaneously, both as the subject and part of the object in the affairs of nature, it doesn't make sense to stick to the linguistic dichotomy between subject and object, act and material (or, to talk about an independently existing Nature) that featured so prominently in the analyses of experience and Nature in traditional or mainstream philosophy. This is because the boundary that those designations were meant to outline has been rubbed off in the symbiotic relation between man and Nature.²⁶ The third point is that experience (as rightly noted by traditional philosophers) involves awareness of

²⁵ It is reasonable for critics to challenge Dewey on what he meant by "processes of experiencing" and "act of experiencing". The way the two phrases were used in *Experience and Nature* arguably did not shed light on the distinction between the conception of *experience as perception* on one hand and the conception of experience as involving more than perception on the other hand that Dewey intended. However, apparently, the two phrases are not synonymously used. "Acts of experiencing" seems to indicate the use of the senses in apprehending the constituents of the external world. Thus we can talk about act of seeing, tasting, smelling, and etc. (J. Dewey, 1925, p. 17). The "processes of experiencing" on the other hand seems to indicate what we call the history of humanity.

²⁶ Traditional philosophers were sceptical about experience having content that can be seen as parts of independent reality on the ground that they are relative to individual psychology and varying perceptual circumstances surrounding experiencing nature. Good examples abound of how differences in experiences of taste and perception of colours are attributed to differences in physio-psychological states of the subjects or conditions that the experiences occur.

nature. However, this awareness does not begin and end with reflection on nature as the traditional philosophers erroneously believed. It includes awareness of purposes and plans, the desires and emotions (which Dewey referred to as “functions” and “comprehensive activities”), through which the constituents of Nature are administered and transformed (J. Dewey, 1925, p. 11).

Consequently, we can say that *Experience* for Dewey does not only denote an epistemological term as held by traditional philosophers, it is fundamentally an ontological term for him. Traditional philosophers debated the nature of experience in the context where the concern is exclusively about how we can justify our knowledge claims about the external world.²⁷ Consequently, experience was construed exclusively as an epistemological term. For Dewey, the primary fallacy of Western philosophy manifests in this belief that all types of experience are to be read as ultimately a form of cognition. This fallacious understanding of experience, according to Dewey, was based on an equally false premise that knowledge is the only relationship we can have with reality. Dewey called this conception of experience an intellectualist’s fallacy (1925, p. 21). On the contrary, for Dewey, experience denotes both cognitive and non-cognitive interaction with reality. He contends, however, that we interact first, directly with macroscopic structures of the world in terms of having, using, eating, enjoying, phenomena presented by reality before we bother to have systematic cognitive operations concerning them.

Three questions are important. How does this focus on the subject-matter of primary experience constitute a metaphysics? If it is accepted as a legitimate metaphysics, how is the foundational role ascribed to it in relation to other cognitive inquiries, different from those ascribed to metaphysics (as first philosophy) in traditional philosophy? What makes it naturalistic? Dewey provides two answers to the first question. First, both the sense-contact primary experience

²⁷ The common belief espoused by empiricist philosophers in the traditional setting like Locke, Hume, and Hamlyn was that basic beliefs can be established from sensation or impression to serve as indubitable foundations of knowledge. Hamlyn’s position is a good proxy for these empiricist foundationalists. See Hamlyn, D. W. (1970). *The Theory of Knowledge*, in O’Connor D.J. (ed.) *Modern Introductions to Philosophy* (London and Basingstoke: The Macmillan Press Ltd.), Page 35.

and the secondary cognitive experience define human transaction within nature or human existence in nature. This is a substantive concern in metaphysics. Second, Dewey presents the distinction between raw contacts with nature (primary experience- in which he sees humans are “users”, “feelers”, and “imagers”) and the refined cognitive inquiries and manipulation of nature (secondary experience- in which humans are knowers) as lead-in into the understanding of what he calls “traits of existence” which is the general subject-matter of his naturalist metaphysics. This was discussed in detail in section 2. His answer to the second question is that, while traditional metaphysics (as first philosophy) is construed as a quest to construct a foundation for science from some indubitable subjective experiences (such as Cartesian Cogito), Dewey’s conception of the foundational role of metaphysics is anchored on empirical and social concerns. For instance, in a comment concerning Dewey’s notion of experience “as a process”, Alexander writes:

“Experience” for him meant a process situated in a natural environment, mediated by a socially shared symbolic system, actively exploring and responding to the ambiguities of the world by seeking to render the most problematic of them determinate (T. M. Alexander, 1987, p. xiii).

Alexander’s point is that Dewey’s naturalistic conception of experience is closely linked to or mutually entailed his naturalistic theory of reality or nature. The naturalistic themes that fundamentally define these conceptions include: (i) nature and man are inseparable (ii) that experience is of nature and consequently both have the same basic features. Both are dynamic and characterised by stable and precarious events. I discuss this view in depth in section 2.2. In addition, the relation between his notions of experience and reality also reveals a metaphysics in terms of the conception of the nature of a human species that evolves. Humans are presented as natural problem solvers, who embark on experimental inquiries with the purpose of manipulating nature for survival.²⁸ This conception of the nature of the human species influenced Dewey’s naturalist conception of the goals

²⁸ However, it must be noted that this problem-solving trait, which arguably human species share with other animals such as beavers, does not define the entire history of humanity. Dewey identifies some experiences which he calls “esthetic”; experiences that are not embarked upon to solve problems but are ends in themselves.

of metaphysics, epistemology and science. These issues were discussed in chapter three (Dewey's naturalistic epistemology). For present purposes, I consider some objections against Dewey's conception of human experience.

2.3 Some criticisms of Dewey's naturalistic conception of human experience

Several objections have been raised against Dewey's conception of experience. These include that it is ambiguous (Bernstein, 1961, p. 9; Murphy, 1951, p. 221), , that he reduces reality and experience to processes or events (Gale, 2010a, p. 121), that he identifies experience with existence (Boisvert, 1988, p. 57), and that his analysis of experience shows why nobody needs a metaphysics (Rorty, 1982, p. 72). However, since most of these objections are either against his theory of existence or his version of metaphysics in general, I will examine most them at the end of this chapter. For present purposes, I will focus only on the objection that Dewey's notion of experience is ambiguous.

2.3.1 The objection that Dewey's notion of experience is ambiguous

Several critics of Dewey seem to agree that he has a point in contending that experience is more than perception. However, some have challenged his conception of "Experience", most especially, the way it was presented as a necessary background to existence. The idea is that the analysis of experience provided by Dewey is too open-ended, to the point that anything may count as part of Nature. Although Sleeper is an apologist of Dewey, he succinctly states the way this objection is often couched: "Dewey has written that experience denotes just this wide universe... everything without discrimination, so that experience ceases to have meaning" (Sleeper, 1986, p. 106).

The question is: What is the basis for this objection? What are the implications? Bernstein contends that Dewey's notion of experience betrays his latent subscription to idealism while claiming to be empiricist. For Bernstein,

The pivotal point of Dewey's rejection of idealism is in his insistence that experience is far more extensive than knowing.... But in his polemical defence of the integrity of experience, Dewey claimed so much for experience that it became difficult to see

what was not experience, what if anything controlled and limited experience. It looked as if Dewey, who had so many harsh words about idealism, was serving it up in another form (Bernstein, 1961, p. 9).

Bernstein's argument is that in a typical empiricist and non-idealist account of "experience", there is always a distinction between what an epistemic agent is consciously aware of (regarded as "experience") and what reality is (what the awarenesses are all about). Consequently, for him, traditional philosophers were able to draw rigid lines between what is part of nature (objective) and what is exclusively about an agent's psychology or private sensations about nature (subjective experience). However, in Dewey's conception of experience, as the objection goes, both what the agent is aware of and what he is not conscious of are legitimately regarded as part of his experience, rendering experience boundless and consequently beyond the reach of empirical investigation.²⁹ The impression created by Bernstein is that Dewey's conception of experience is indistinguishable from idealist philosophy such as Hegel's conception of Absolute in which there is identity of Nature and Spirit. What this implies, according to Bernstein, is that Dewey's philosophy offers neither what Nature really is nor what experience really denotes, and Dewey's claims to empiricism and naturalism are suspect.

The objection that Dewey's analysis of Experience and its relation to Nature is vague is also defended by Murphy in a slightly different way. According to him, Dewey used "Experience" to indicate two incompatible themes in his philosophy. The first indicates the joint linking the experience of the human species to a world which antedates their existence. The second is that Dewey used "Experience" to indicate "the immediate terminus and resolution of all inquiry, including inquiry into the relations between humans and the world (Murphy, 1951, p. 221). Murphy thought that the incompatibility of these themes in Dewey's philosophy was made

²⁹ At first glance, this objection appears to be an epistemological constraint rather than a metaphysical one. And given the fact that Dewey seems to be interested primarily in the ontological denotation of the concept of experience rather than its epistemological denotation, this objection seems to lose its bite. However, as the analogy of the geologist (who was cited above by Dewey) goes, there is the implication that Experience as conceived by Dewey antedates the existence of humans. In this case, the objection becomes more potent because it has to do with ontology.

evident by the tension it creates between Dewey's metaphysics and epistemology. If it is true that experience antedates the existence of humans, then, it must necessarily be false that experience is the outcome or termination of human inquiry. There is "an unhappy discrepancy between experience as it ought to be if its place in the natural world is to be made intelligible, and experience as it must be if Dewey's epistemology is correct" (Murphy, 1951, p. 221).

The implications of Murphy's objection were more widely explored by Shook. According to Shook, the role played by the "World" in Dewey's theory appears in two incompatible ways. In the first we have a presentation of Experience in which the World is like a stadium in which experience takes place. In this conception, the world is primary in determining the proper relationship between humans and the world. In the second sense, we have the World (and activities in it) occurring within human immediate experience (Shook, 2000, pp. 8-9). In this second sense, the world is regarded as dependent on immediate experience. This renders his naturalism is suspect.

In response to this objection, Sleeper offers two arguments. Firstly, he contends most critiques of Dewey's conception of experience are done in reference to the ideas traditionally associated with the concept and consequently miss the radically new denotation of the concept intended by Dewey. Consequently, Dewey's conception of experience cannot be examined independently of his entire naturalistic philosophy. According to him, "experience" in mainstream philosophy is conceived as a method and should not be confused with Dewey's conception of "experience" as a distinctive subject-matter of metaphysics (Sleeper, 1986, p. 106). By "method" he meant a method of knowing. According to Sleeper, the traditional conception necessitates a distinction between experience (as a method) and nature (as an object of inquiry) and consequently, the idea of an independently and antecedently existing reality becomes sacrosanct. However, he contends that Bernstein and other critics are wrong in expecting Dewey to subscribe to the idea that there should be some limiting conditions imposed by reality on experience on the ground that this is the very fact that Dewey is contesting. For Dewey, the

experiencer and his experience are integral parts of reality that cannot be separated (Sleeper, 1986, p. 109).

The second response from Sleeper is an explanation about the historical development of Dewey's philosophy. According to him, most criticism of Dewey's notion of experience is caused by failure to note the significant differences between stages that characterised the development of Dewey's philosophical thought and equally the failure to appreciate the novelty of its climax. According to Sleeper, Dewey's later work evolved from an idealistic background and transformed into a thoroughgoing naturalism and radical empiricism. According to this view, the development of Dewey's thought comes with modifications of previous ideas to engender a much matured and consistent position. Other Dewey apologists such as Boisvert (1988, pp. 45- 62), T. M. Alexander (1987, p. 58) and Margolis (2002, p. 112) also subscribe to this view.³⁰ According to Sleeper,

There can be little doubt that, overall, the notion of the real as transformational derives from both Hegel and Darwin. But Dewey makes the genetic history of his ontology explicit, and that ontology is explicitly his own. He accepts neither Hegel's conception of change as dialectical nor Darwin's notion of adaptation to a relatively stable environment... Moreover, he pointed out that experimental knowing is nothing new, that the logic of experience has been there all the time. It is just that the metaphysics of the common man has been ignored by philosophers (Sleeper, 1986, p. 122).

Sleeper's point is that Dewey's later work manifests a transition from idealism to an empirical position influenced by evolutionary biology. His stronger argument is that Dewey was able to develop a distinct philosophical position out of several traditions that influenced the development of his thought. The suggestion is that Dewey's notion of experience must be examined within the context of Dewey's later work. My position on this debate is this. Given that Dewey's conception of

³⁰ Dewey's philosophy is usually divided into three stages: the early, middle and later works. Boisvert identified three phases: Idealism, Experimentalism and Naturalism. See Boisvert, R.D. (1988). *Dewey's Metaphysics*. New York: Fordham University Press. Boisvert argues that most critics failed to comprehend Dewey's Metaphysics on the ground that they failed to see how Dewey tactically altered his original Kantian outlook. He contends that critics argued that Dewey remained an idealist, and explicitly compared him to Kant (Page 46). Shook identifies two stages: Dewey's early career, characterized by allegiance to Hegel's idealism, and his post-1925 thought in which he elaborated a thoroughgoing naturalism (Shook, 2000, pp. 7,10).

experience is interwoven with his other metaphysical theses (such as his theories of reality and human mind), I argue that Sleeper's suggestion is fair enough; that the meaningfulness of Dewey's theory of experience should be decided by examining the consistency and meaningfulness of his metaphysics as a whole.

I conclude that Dewey's conception of experience offers a framework for a naturalistic metaphysics that is empirical and more importantly, that complements science. However, since his conception of experience is intertwined with his conception of reality, the plausibility of his version of metaphysics is not assessable until a matching naturalistic theory of reality is presented. This is what I examine in the next section.

2.4 Dewey's naturalist metaphysics; from the conception of experience to the conception of reality

2.4.1 Introduction:

In this section, I discuss how Dewey moves from his conception of experience to his conception of Reality or existence. Consequently, I discuss how his theory of experience is closely linked with his theory of existence. More specifically, I discuss how, for Dewey, facts about Experience are manifestations of the nature of reality. Such facts include: (i) that the constituents of reality are both precarious and stable (ii) that reality is dynamic and evolving and pointing to the fact that reality is a process and (iii) that reality is an instrument for multiple control. I discuss his contention that all these claims are made evident by evolutionary theories. I also discuss these claims as the bedrock of his version of naturalism.

More generally, in my discussion of Dewey's conception of reality, I dwell on two important facts. Firstly, given that most objections against Dewey's conception of reality border on the challenge that he is more of an idealist than a realist, I explore some theses regarding realism with the purpose of establishing those that Dewey identifies with. However, I contend that his position on reality renders obsolete the traditional dichotomies between realism/anti-realism and materialism/anti-materialism. Consequently, I explore how he struggles to differentiate his position

from traditional positions such as realism, physicalism and materialism. I discuss his approach to these dichotomies in terms of adopting evolutionary theories in answering several ontological questions that have interested traditional philosophers. I examine his argument that most of these questions are dissolved as pseudo problems or solved, when the root-causes of these problems are empirically and naturalistically investigated. Secondly, I discuss his contention that traditional philosophy became encumbered with several dualist theses, as consequences of non-naturalistic metaphysics. These dualist theses include metaphysical distinctions between appearance and reality, man and nature, body and mind, and natural and supernatural.

2.4.2 Dewey's critique of traditional conceptions of reality

In this section, I discuss Dewey's critique of traditional conceptions of reality. I will explore his arguments that traditional metaphysics inherited its ontological account from the Greek culture which is dominated by certain religious and cultural foregrounds. I also discuss his contention that the imposition of these religious-cultural themes on Greek ontological accounts gave rise to some essential features of traditional metaphysics, such as: (i) a conception of reality that is static and uniform (ii) the emergence and dominance of an unempirical and transcendental metaphysics, and (iii) a conception of metaphysics that is antithetical to science.

2.4.2.1 Dewey's rejection of the identification of reality with what is stable and complete

In *Experience and Nature*, Dewey's conception of experience serves as the axis for his theory of reality. Both conceptions constitute the ground from which his naturalistic metaphysics is developed. In one of numerous instances where he uses his notion of experience as a pointer to reality, he writes:

As against this common identification of reality with what is sure, regular and finished, experience in unsophisticated forms gives evidence of a different world and points to a different metaphysics. We live in a world which is an impressive and irresistible mixture of sufficiencies, tight completenesses, and order, recurrences which make

possible prediction and control, and singularities, ambiguities, uncertain possibilities, processes going on to consequences as yet determinate (J. Dewey, 1925, p. 43).

Two fundamental claims in the passage are: that Reality is recurrent and that it consists of a mixture of both precarious and stable. Consequently, Reality, for Dewey, is *dynamic* and inherently *pluralistic*. In his explanation of the dynamic nature of reality, Dewey contends that “the stablest thing we can speak of is not free from conditions set to it by other things”. Thus, “even the solid earth mountains, the emblems of constancy, appear and disappear” (J. Dewey, 1925, p. 61). His point is that nothing is permanently fixed because reality or nature keeps on evolving. Consequently, he concludes that “every existence is an event” (1925, p. 61). His major point is that the dynamic nature of reality is neither an indication of some deficiencies peculiar to human understanding nor suggests any sceptical doubt about the possibility of discovering knowledge, as suggested by the philosophers (such as Heracleitus) who have acknowledged the permanence of change.

In his contention that reality is pluralistic and dynamic, Dewey rejects the traditional practice of regarding what is unstable or changing in the physical world as appearances or imitations of what is real, as found prominently in Plato’s conception of reality. In addition, monistic ontological theories such as materialism or physicalism are rejected because a reality with plural features will render any monistic view inadequate.³¹ Another important aspect of Dewey’s conception of reality is that changing phenomena are not to be regarded with trepidation. The pluralistic and dynamic nature of reality points to its instrumental nature - as an instrument for multiple control. According to Dewey:

³¹ Dewey compares the supposed distinction between the “matter” of the materialists and the “spirit” of the idealists with the distinctions made by those who regard the map of America, on one hand, as “certain basic relationships among the activities of the citizens of the country defined by properties and processes that influence the rate and direction of change and the literalists, on the other hand, who regard the map as something external, a fixed, rigid framework to which all changes must accommodate themselves” (J. Dewey, 1925, p. 63). He concludes that “what we call matter is that character of natural events which is so tied up with changes that are sufficiently rapid to be perceptible as to give the latter a character of rhythmic order, the causal sequence (J. Dewey, 1925, p. 63).

The conjunction of problematic and determinate characters in nature renders every existence as well as every idea and human act, an experiment in fact, even though not in design. To be intelligently experimental is but to be conscious of this intersection of natural conditions so as to profit by it instead of being at its mercy (J. Dewey, 1925, p. 61).

For Dewey, what is common in all traditional metaphysics is “the bias in favour of the fixed, certain and finished”(1925, pp. 25, 43). He regards this as an instance of selective emphasis “which introduces partiality and partisanship into philosophy”(1925, p. 24). He contends that Aristotle came nearest to developing a naturalistic metaphysics at two historical points. Firstly, when he acknowledges contingency and change in his physics. Secondly, when he admits pluralistic features of the world in his distinctions between worlds of Forms and ideas, on one hand, and in his theory of natural ends, on the other hand. However, these tendencies towards a naturalistic ontology were surrendered for a bias for the fixed and stable and for “a theory of the superiority in Being of rounded-out fixities” (J. Dewey, 1925, p. 43). Dewey notes that “Kant assigns all that is manifold and chaotic to one realm, that of sense, and all that is uniform and regular to that of reason” (1925, p. 45). He also notes the popularity of philosophers who acknowledged the fluxity of nature, from Heracleitus to Bergson, but contends that even they betray the intensity of the craving for the sure and fixed (1925, p. 45). Finally, he contends that most modern philosophies are either monistic or dualistic, instead of pluralistic.

Dewey identifies three consequences of this bias for what is uniform and regular. Firstly, an incomplete account of the world is given by non-naturalistic metaphysics because some experiences (events and activities) in the world are regarded as unreal or un-natural - arbitrary lines are drawn between nature and human experiences. Secondly, by constructing a metaphysics on the ontological account with some peculiarities supposedly beyond the grasp of science (the study of Being qua Being - a Being of all-rounded fixities), traditional metaphysics estranged itself from scientific knowledge. Finally, Dewey contends that the features of this ontological account engender what he pejoratively calls “arbitrary intellectualism”(1925, p. 21). Arbitrary intellectualism comes in, according to

Dewey, when experiences showing the manifestations of nature and testimony of the characteristics of natural events are abandoned for reflective analysis that is based on presuppositions about what exists (1925, p. 20). The description of a table mentioned earlier from the perspective of a non-naturalistic metaphysics suffices as a good example. From this perspective, the collection of sense-data became the only aspects of the table that we have the right to be sure of. What makes this version of metaphysics un-naturalistic, according to Dewey, is the failure to note that philosophy is not about understanding nature alone but understanding how it can be manipulated or used as instrument for multiple controls.

Another important point to be noted is that Dewey sees a naturalistic metaphysics as a reconstruction of traditional metaphysics rather than rejection. This is a contention he was defending in his later work, although self-acclaimed apologist Richard Rorty has a different view.³² I address this contention at the end of the chapter. However, there is one question that is important at this point: How comparable (and plausible) is Dewey's conception of reality with modern and contemporary ontological theories? Can his position be categorised as a realist or idealist, an empiricist or a rationalist position? Answers to these questions are considered in the next section.

2.5 Dewey and some modern positions on the nature of reality

Introduction:

Modern and contemporary discussions on the nature of reality have been dominated by positions such as materialism, physicalism, and realism. There are also anti-realist positions such as idealism, constructivism and so on. Consequently, it is important to compare and contrast Dewey's views on reality with some of these positions. However, it is arguable that most critics have concentrated on

³² Rorty interprets Dewey's position on metaphysics as an explanation of why nobody needs a metaphysics. He calls this stance therapeutic- a stance that arguably dismisses any preoccupation with metaphysical problems as unnecessary (Rorty, 1982, p. 72).

Dewey's claim to realism more than any other position³³. Consequently, in this section, I explore some theses on realism and try to figure out a thesis that expresses Dewey's notion of reality. I skip the consideration of Dewey as a naïve realist on the ground that he is obviously not. Rather, I consider metaphysical realism, scientific realism and the rejection of realism.

2.5.1 Understanding Dewey's conception of reality as a metaphysical realism

Metaphysical realism has been variously defined through two claims; a claim about what entities exist and a claim about their independent nature (Brock & Mares, 2007; Devitt, 1984; Marsonet, 2002; Putnam, 1981, p. 49; 1990). The claim that something exists, as obvious as it is, seems to be the only non-controversial ground that unites all realists. However, Brock and Mares called this general converging point "the existent axis" (2007, pp. 11-33) and a "minimal realist" position (2007, p. 11) and Devitt called it a "weak realism" (1984, p. 15). The main point is that, saying metaphysical realists affirm that some entities exist is too general to distinguish their position from other versions of realism.

However, several philosophers have taken saying something exists objectively as a stronger metaphysical realism (Brock & Mares, 2007; Williamson, 1995, p. 746). Brock and Mares interpreted this notion of "objective existence" as "mind-independent reality" (2007, pp. 34-35). For Marsonet, some philosophers take the "independence" theme to be a pointer to some factors about reality that cannot be described by science (2002, p. 1).³⁴ Philosophers such as Putnam have added other theses such as: (i) that there is only one description of the way the world is

³³ Critics have concentrated on how to establish Dewey's metaphysics as representing an idealist position rather than that empiricist-realist or naturalist position that he claims to subscribe to Reichenbach (1939), Santayana (1977), and Piatt (1951).

³⁴ Some other scholars have seen the idea of a mind-independent reality as a "carving" and "cutting" conception of reality and argued that these are misleading metaphors (Hilpinen, 1992, p. 1). These scholars argued that the motivation behind the establishment of a mind-independent reality is to attain the true picture of the world. This motive, according to them, is a wild goose chase because each realist approach has been confronted with endless controversies (Hilpinen, 1992, p. 1), (Putnam, 1990, pp. 3-29). Some philosophers such as Devitt even believe that when the existence and independency themes of realism are added together, it only points at an "undifferentiated, uncategorised external world and not at a particular existence (Devitt, 1984, p. 15). His point is that realism has nothing to do with truth (Devitt, 1984, pp. 34-46).

that is true and (ii) that such truth involves some kind of correspondence relation between claims and the world (Putnam, 1990).

There is another way of describing metaphysical realism that I think can be more instructive, in terms of its methodological approach to ontological questions. Exploring how Kant shifted from a metaphysical realist to an empirical realist (Rockmore, 2004, p. 2), Rockmore notes that one of the most fundamental differences is abandoning intuition-based strategy for an empirical approach (2004, p. 71). According to him, what is common to a transcendental idealist and a metaphysical realist in their discussions about “a thing-in-itself”, is the acceptance that perceptual experience or empirical observation is inadequate as an approach to understanding what an object is fundamentally made of - leaving the use of intuitive reasoning as the only viable strategic approach (2004, p. 1). A detailed discussion of the development of Kant’s thought and the critique offered by Rockmore will not be attempted here. For present purposes, my target is to identify some basic ideas about metaphysical realism and consider how Dewey fits in.

In *Experience and Nature*, Dewey’s contends that the goal of naturalistic metaphysics is the “detection and the description” of what he called the “generic traits of existence”. He defines these traits in terms of “characteristics or qualities shared by all existences” (1925, pp. 51-52, 60). This idea seems to suggest the “one-way description of the world” that Putnam ascribed to metaphysical realism. It also seems to suggest the idea of metaphysical realism described by Marsonet: identifying “factors about reality that cannot be described by science”. Are these suggestions strong enough to establish Dewey’s subscription to metaphysical realism? I think they are not. Some of Dewey’s theses on naturalism, his insistence that reality is pluralistic, his rejection of the conception of a world that is independent of human beings (independent of human experience), his rejection of mind/body dualism or nature/human dualism, and his insistence that only empirical method can lead to the discovery of knowledge of the world are outright negations of the ideas about metaphysical realism that we have considered

above.³⁵ If Dewey's view on reality cannot be classified as metaphysical realism, what about scientific realism?

2.5.2 Understanding Dewey's conception of reality as a subscription to scientific realism

Philosophers have identified several theses as defining scientific realism. For instance, Paul Churchland considers it from the perspective in which theoretical understanding of entities in science is contrasted with commonsense knowledge of entities. According to this perspective, knowledge of theoretical entities such as molecules, nuclei, and electro-magnetic waves, is different from our common sense knowledge of objects such as apple, tables, kitchen pots and sand. More importantly, "theoretical understandings" are regarded as artificial, speculative and essentially stable while the latter is natural, manifest and autonomous (Churchland, 1979, p. 1). Churchland's main point seems to be ascertaining the supremacy of science over common-sense. John Watkins provides a succinct view about this attitude to the scientific view of the world. According to him, what is asserted by the doctrine of scientific realism is "the omnicompetence of physics". According to this view, "all meaningful questions about matters of fact are in principle answerable by a completed physics- if there are questions which appear to be unanswerable by physics this is only because physics is as yet far from being completed" (Watkins, 1996, p. 219). However, philosophers of science such as Richard Boyd have identified some theses that arguably are more popular or more fundamental. According to him:

By "scientific realism" philosophers mean the doctrine that the methods of science are capable of providing (partial or approximate) knowledge of unobservable ('theoretical') entities, such as atoms or electromagnetic fields, in addition to knowledge about the behaviour of observable phenomena (and of course, that the properties of these and other entities studied by scientists are largely theory-independent) (R. N. Boyd, 1988, p. 188).

³⁵ The conception of an objective, mind-independent reality violates Dewey's naturalism at various points. First, it violates his social and functionalist theory of mind which is discussed in one of the subsequent subsections in this chapter. Second, it violates his Instrumentalism which shall be discussed with Dewey's Epistemological naturalism in the next chapter.

While Boyd's view about realism points at the supremacy of the scientific world-view, it does so from a specific point- the ability to engender knowledge of unobservables. What makes his position more "realistic" rather than merely arguing for the supremacy of science is his claim that, in spite of the unobservability of theoretical entities such as atoms and electromagnetic fields (which makes scientists "routinely modify or extend operational 'measurement' or 'detection' procedures"), scientific knowledge about them is theory independent in the sense that it reflects objective facts about nature. Scientific realism, construed in Boyd's sense, is usually contrasted with a non-realist position stating that theoretical entities in science are constructions. One of the strongest arguments from philosophers holding constructivist views of science (in philosophy of science and feminist science), noted by Andre Kukla, is their counterfactual argument stating that in those instances where entities are constructed, the scientific world-view reflects only choices counterfactually made and not objective reality (Kukla, 2000, p. 1). The point of philosophers holding a constructivist view is that the scientific world-view could have been other than it is (what they are presented to be). How does Dewey's position fit with any of these theses of scientific realism?

In our previous section, we discussed how, in *Experience and Nature*, Dewey contends that secondary experience (in which the objects of science and philosophy belong) is meant to enlarge our understanding of the non-cognitive transactions with reality which characterise primary experience. However, what I intend to draw attention to at this point is how he describes the "characters of objects of science" in a way that suggests the notion of scientific realism provided by Richard Boyd. He writes:

First, immediate things come and go; events in the direct way of seeing, hearing, touching, liking, enjoying, and the rest of them are in rapid change; the subject-matter of each has a certain uniqueness, unrepeatedness. Spatial-temporal orders, capable of mathematical formulations are, by contrast, constant. They present stability, recurrence at its maximum, raised to the highest degree... The second character of objects of science follows from this feature. The possibility of regulating the occurrence of any event depends upon the possibility of instituting substitutions. By means of the latter, a thing which is within grasp is used to stand for another thing

which is not immediately had, or which is beyond control. The technique of equations and other functions characteristic of modern science is, taken generically, a method of thoroughgoing substitutions. It is a system of exchange and mutual conversion carried to its limit (J. Dewey, 1925, p. 119).

But is Dewey's position on reality exclusively defined by scientific realism? It seems the answer is negative. Firstly, contrary to Churchland's observation that scientific realists hold the object of science as engendering "stable and autonomous" theoretical understanding", Dewey contends that in validating theoretical entities, theories concerning scientific objects are referred back to the objects of crude experience for check and confirmation. This view also contradicts Watkins' explication of scientific realism in terms of the "omnicompetence of physics".

Turning to Dewey's conception of reality within the ontological account provided in his naturalistic metaphysics, raises further doubt concerning the credibility of interpreting his position to be scientific realist in particular and realist in general. For instance, he writes:

Yet, philosophers, and strangely enough philosophers who call themselves realists, have constantly held that the traits which are characteristics of thinking, namely, uncertainty, ambiguity, alternatives, inquiring, search, selection, experimental reshaping of existential conditions, do not possess the same existential character as do the objects of valid knowledge. They have denied that these traits are evidential of the character of the world within which thinking occurs (J. Dewey, 1925, p. 60).

Is Dewey extending the theoretical approach to unobservable entities in science to un-observable entities in metaphysics? Or, is he contending that a realist need not be a scientific realist in Boyd's sense? It seems that a scientific realist (such as Boyd) will not consider Dewey's claim that the characteristics of thinking (and other esthetic experiences such as emotion and feeling) are deeply rooted in the character of the world within which thinking occurs, as espousing scientific realism. The rejection will be based on the argument that "the characteristics of thinking" mentioned by Dewey are not comparable with the unobservable but 'theoretically' detectible characters of atoms and electromagnetic fields. Here it seems Dewey is not a scientific realist.

In addition, there are several other passages in *Experience and Nature* where Dewey's discussion of "refined objects of science" suggests that they are "constructions" or "instruments" for understanding the objects of crude experience. Although Dewey claims that the referents of scientific terms are what the scientists share with the lay man - the sun, stone and so on, nonetheless, the refined objects of reflection in the natural sciences are regarded only as *pathways* or *means* of knowing and controlling the crude objects of immediate experience. *The objects of knowledge in scientific theories are seen as abstractions from crude and immediate interaction with reality. Scientific objects are responses to problems and needs that arise in the encounter with nature.* Scientific objects, for Dewey, are essentially about the process of knowledge. As Shook nicely puts it, the process of knowing, for Dewey, "essentially requires the purposive manipulation of natural things in the environment (2000, p. 7). These descriptions seem to suggest a constructivist view.

Reichenbach provides an objection against Dewey's conception of scientific objects from another perspective. According to him, Dewey's conception of scientific objects either affirms that relations are ontologically as real as objects or dissolves scientific objects into relations of "qualitative" objects. Reichenbach quotes from Dewey's *Quest for Certainty*:

The physical object, as scientifically defined, is not a duplicated real object, but is a statement ... of the relations between sets of changes the qualitative object sustains with changes in other things (Reichenbach, 1939, p. 164).

How does this add to the denial of Dewey being a scientific realist? I think Reichenbach is pushing Dewey into a dilemma: either he concedes dualism in terms of admitting that scientifically defined objects and the objects perceived by a lay man are two different sets of things, or he agrees that scientifically defined objects do not exist beyond the scope of scientific inquiries. Reichenbach seems to think that admitting the first horn of the dilemma will render Dewey's naturalism inconsistent and that the second horn will render his position a denial of scientific realism in particular and realism in general. I think Dewey denies both horns of the dilemma. Let us explore Dewey's answer to the first horn.

Reichenbach believes that Dewey was afraid of duplication of things that could lead to the conception of transcendental things such as Kant's "things – in-themselves" (1939, p. 168). I think Reichenbach's suspicion is right. However, he seems to have missed Dewey's analysis of scientific objects as "refined objects" of primary experience specifically in terms of how both are continuous. The fact that a scientist will not see any duplication in the idea of water being H₂O, seems to confirm Dewey's contention that there are some problems in philosophy (such as Reichenbach's challenge) that are typically philosophers' problems - different from problems of men (J. Dewey, 1968).

Dewey noted that philosophers have not been able to make a distinction between reality and the objects of their reflections and recognise the connection between them as has been done in science. According to him, while some philosophers have identified "sense-data", "substance", "sensibilia", etc., as their objects of reflection and were busy looking for the reality behind them without any success, some have taken these objects of reflection as reality. The common error that Dewey noted as the cause of these problems is that philosophers have either failed to acknowledge the priority or precedence of the 'reality' that led to those philosophical reflections in the first place or regarded the objects of reflection as primary and independent of what they are about. Consequently, objects of their reflections are defined as necessarily antithetical to reality itself. A good example that Dewey most likely has in mind is Plato, who defined reality (Form) as having characteristics that are the exact opposite of "appearance".³⁶ Dewey attributed the failure of philosophers to the failure to use either the scientific method of investigation or the method that he called "denotative empirical methodology".

Let us turn to the second horn of Reichenbach's dilemma. In *Logic: The Theory of Inquiry*, Dewey actually contends that "relation" has a legitimate ontological status. However, this claim is specifically explained in the context of his naturalistic conception of logic, as an ontological account of reality. While this issue will be

³⁶ Plato was led from his observation of imperfections in the physical world to theorize about a world of Forms that is perfect.

taken up more extensively in Chapter Four, it is prudent to provide an instructive hint for the present purposes. In *Logic*, Dewey contends:

The functional correspondence, or conjugate relationship, of involvement and implication, kinds and categories, characteristics and characters, generic and universal propositions, signifies, to sum up, that they represent cooperative divisions of function in the inquiry which transforms a problematic situation into a resolved and unified one. The internecine war between empiricists of the type of Mill and the school of rationalism will continue as long as adherents of the one school and of the other fail to recognize the strictly intermediate and functional nature of the two forms of propositions as cooperative phases of inquiry. But the needed recognition cannot be effected until the field of logic is taken to be as broad as that of controlled inquiry. The relations of terms and propositions in discourse is such as to make possible purely formal statement - purely formal in the sense that it is the very nature of ordered discourse to deal with possibilities in abstraction from existential material (J. Dewey, 1991, pp. 278-279).

Dewey's point is that laws of thought, logical rules and symbols are pointers to relations between objects in the world in which human relations to other objects in nature forms an integral part. Among these relations, Dewey is interested in material ones which he is citing as cases of relations having ontological status. Sleeper puts Dewey's view in a more succinct way:

Dewey's theory of inquiry, of which logic in its more formal character is an integral part, is based on the proposition that existential relations among individual entities are disclosed by the means employed in inquiry. Among such means Dewey is quick to identify acts of inference, for it is only by actually making inferences that the two most fundamental forms of existential relations are discovered. These two relations are involvement and that between the sign and what is signified. Both are relations of causal interaction involving individual existences and the existential conditions of the situations in which these interactions take place (Sleeper, 1986, p. 160).

Sleeper's point is that the act of inference marks a causal relation (plays a transformational role) between a problematic situation and the envisaged non-problematic or settled situation. Inferences in this context are not restricted to formal reasoning, but are actual overt transformational activities. Consequently, he contends that we can read Dewey's theory of logic as a theory of ontological commitments to existential propositions. For him, "it is an ontology of existent objects of knowledge, of the relations of those objects, and of the kinds that are

instituted by means of those relations, an ontology that is pluralistic and relativistic ...” (Sleeper, 1986, p. 161).

However, what I take to be the most substantive argument for the claim that Dewey is not a scientific realist lies in Dewey’s emphasis that natural science, like any other cognitive endeavour using reflective analysis, cannot provide an ontological account that is exhaustive, as when reflection occurs involving a natural phenomenon (whether in science or philosophy), a finite aspect of it is focused on and reflected upon while the larger aspects of it are relegated to the background. On the incompleteness of any ontological account of nature that involves selective emphasis, Dewey writes:

The favouring of cognitive objects and their characteristics at the expense of traits that excite desire, command action and produce passion, is a special instance of a principle of selective emphasis which introduces partiality and partisanship into philosophy.... But in ordinary matters and in scientific inquiries, we always retain the sense that the material chosen is selected for a purpose; there is no idea of denying what is left out, for what is omitted is merely that which is not relevant to the particular problem and purpose in hand (J. Dewey, 1925, p. 24).

Thus, for Dewey, the acknowledgement of selective emphasis in natural sciences puts it on a more reliable epistemological path to the truth about reality than we have in philosophy, because of the acknowledgement that the objects of knowledge are chosen on an instrumental basis rather than on the belief that they are *all there is*. This acknowledgement, *Dewey argued*, protects science from “conversion of eventual functions into antecedent existence: a conversion that may be said to be the philosophic fallacy” (1925, pp. 27-28). However, this closeness of science to the truth about reality notwithstanding, Dewey’s argument continues that a substantial part of reality is left out in scientific reflection and theorization when the question about the complete or more detailed picture of reality is raised. Dewey notes the danger inherent in every selective emphasis. There is the assumption that those aspects that are left out do not exist. For Dewey,

It tends to be assumed that because qualities that figure in poetical discourse and those that are central in friendship do not figure in scientific inquiry, they have no

reality, at least not the kind of unquestionable reality attributed to the mathematical, mechanical or magneto-electric properties that constitute matter. It is natural to men to take that which is of chief value to them at the time as the real (J. Dewey, 1925, p. 24).

Was Dewey looking for a Metaphysics that could rival science? Or, was he looking for a cognitive endeavour that we can call the metaphysical foundation of science? I think the reading of Dewey as holding a constructivist position on the objects of knowledge in science seem to suggest that Dewey was looking for a metaphysical foundation for science. A kind of “divide and rule” relationship between science and philosophy seems very appealing where science is engrossed with questions of knowledge while philosophers are engrossed with questions about ontology. Metaphysics becomes the foundation of science in the sense that the need to answer the question what exists (ontology) takes precedence over the need to answer the question what do we know or how do we know or who has the right to claim to know (epistemology).

However, I think the answer to both questions is No. The envisaged naturalistic metaphysics is not supposed to be a rival to science. Unlike in modern philosophy where it is often assumed that the advance of physical science has created a serious metaphysical problem, Dewey argued that the objects of natural science are not metaphysical rivals of historical events but rather, *they are means of directing the latter* (1925, pp. 112, 123). This point is evident when Dewey writes:

The features of objects reached by scientific or reflective experiencing are important, but so are all the phenomena of magic, myth, politics, painting, and penitentiaries. The phenomena of social life are as relevant to the problem of the relation of individual and universal as are those of logic; the existence of political organization of boundaries and barriers, of centralization, of interaction across boundaries, of expansion and absorption, will be quite as important for metaphysical theories of the discrete and the continuous as is anything derived from chemical analysis (J. Dewey, 1925, p. 20).

The important point is that science indicates our cognitive interaction with nature. The primary aim of this interaction is the acquisition of systematic knowledge and to take control of nature. The non-cognitive interaction on the other hand is

primarily not about the acquisition of knowledge. What Dewey is saying here is that before reflection takes place, there must have been some contacts.

One major point against the idea that Dewey is a scientific realist is that he acknowledges that phenomena such as magic, myth, politics and so on, are natural cognitive responses to some problematic situations in human transactions within the world just as a biologist is interested in the outbreak of an epidemic and a geologist is interested in volcanic eruptions. Just because science cannot address questions concerning these phenomena does not mean that they are to be categorised as “spooky elements”. His contention that there are ontological issues that science cannot deal with, disqualifies him as a scientific realist.

It seems to me that there is a promise of uniqueness in the subject matter of Dewey’s metaphysics. Unlike philosophers in traditional philosophy who concentrated on the cognitive side of experience and reality, Dewey envisaged a more rewarding venture by aiming at the neglected counterpart. Dewey was looking for, in the words of Campbell, “a philosophy that will integrate our practical and theoretical lives and would function as a tool of criticism or evaluation of our inherited life” (1995, p. 67). For Margolis, Dewey was envisaging a kind of metaphysics that can close the gap between science and practical experience (2002, p. 112).³⁷ If this suggestion is correct, then our previous suggestion that Dewey wanted a metaphysics that could complement science seems to need some modifications. Dewey seems to be looking for how to deal with issues that science is incapable of or has no interest in dealing with.³⁸ Does this unique interest of Dewey’s metaphysics render him an anti-realist? Some critics argue that it does. I now examine some arguments presented by critics and their implications on Dewey’s claim to realism, empiricism and naturalism.

³⁷ However, Margolis identified another reason behind the kind of metaphysics that Dewey envisaged. He said Dewey was looking for a kind of metaphysics that can accommodate Darwin’s evolutionary theory. A metaphysics that can close the gap *between experience and the animal sources of practical success bearing on survival, well-being, and the satisfaction of our wants and needs* (Margolis, 2002, p. 112).

³⁸ In Dewey’s terms, these will be those issues that do not fall into the realms of “selective emphasis” of science.

2.5.3 The possibility of Dewey as an anti-realist

Several critics have contended that Dewey is not a realist (McGilvary, 1977; Santayana, 1951). For instance, on Dewey's metaphysics, Santayana writes:

This question, which is the crux of the whole system, may be answered, I think, in a single phrase: The dominance of the foreground. In nature there is no foreground or background, no here, no now, no moral cathedra, no centre so really central as to reduce all other things to mere margins and mere perspectives. A foreground is by definition relative to some chosen point of view, to the station assumed in the midst of nature by some creature tethered by fortune to a particular time and place. If such a foreground becomes dominant in a philosophy naturalism is abandoned (Santayana, 1951, p. 251).

A critique of Dewey's claim to naturalism is the primary focus of this passage, but it extends to Dewey's claim to realism when Santayana compares Dewey's "specious kind of naturalism" to naturalism in works of idealists such as Emerson, Schelling, or any Hegelian of the left" (Santayana, 1951, p. 253).³⁹ Santayana contends that Dewey's conception of how human experience is linked with reality indicates a rejection of principles or ideas that can be defined as naturalism and realism. The reason he gave is that while a naturalist and a realist will conceive Nature to be independent of the whims and caprices of human beings, Dewey's conception of Nature is irredeemably anthropocentric. Dewey's conception of reality, is at best, for him, more or less a kind of moral exhortation or at best a relativist's account of Nature. How serious is this objection? At a glance, it seems the disagreement between Santayana and Dewey is all about the differences in their conception of what a consistent naturalist should take into consideration when analysing what reality is. For Santayana, a consistent naturalist will necessarily exclude all that pertains to humans: their observations, moral exhortations and stories in the attempt to map out the constituents of nature. For Dewey, on the other hand, a conception of nature without humans and their activities forming *an* integral part is denatured. At a first glance, it seems the disagreement is what both of them can live with, given the fact that there are

³⁹ Santayana described the "attitude" of these idealists in terms of being "romantic, transcendental, piously receiving as absolute the inspiration dominating moral life in their day and country" (Santayana, 1951, p. 253).

many definitions of naturalism as there are many naturalists, as we have established in Chapter One.

However, Santayana presents a more specific and more fundamental disagreement with Dewey, which goes beyond mere disagreement over conceptual definitions of naturalism when he writes:

Immediacy, which was an epistemological category, has become a physical one: natural events are conceived to be compounded of such qualities as appear to human observers, as if the character and emergence of these qualities had nothing to do with the existence, position, and organs of those observers.... Naturalism could not be more romantic: nature here is not world but a story (Santayana, 1951, p. 253).

Santayana's point is that Dewey treated "immediacy" as a metaphysical category and consequently relegates reality to what is immediate. How does treating "immediacy" as a metaphysical category indicate a rejection of a realist stance? Santayana's point is that "immediacy" is a concept featuring in humans' subjective account of nature or reality. It is an epistemological category because it emanates from humans' knowing process. However, Santayana accuses Dewey of treating "immediacy" as "object" as transcendental, absolute, and groundless (1951, p. 255). Consequently, for Santayana, only in an idealist ontology can a phenomenon that is not part of nature be regarded as such.

The potency of this criticism was amplified by several other critics of Dewey. For instance, building on this objection from Santayana, McGilvary writes:

The object as it existed before it was experienced, was not reality, but only a condition of reality, and the condition is not sufficient to produce reality. Only when the condition is supplemented by an experience which realizes the object does the object become real No thinker, no thought-object; no experience somewhere and somewhen, no meaningful reality anywhere and anytime. This is the truth which is contained in Professor Dewey's contention (McGilvary, 1908, p. 593).

Both critics read Dewey's conception of existence to mean that the existence of reality begins from the awareness of the constituents of the nature by human beings, in their transactions within or with nature. Both are of opinion that this contention involves circular reasoning which renders inconsistent the entire naturalistic metaphysics that Dewey hopes to build on this theory. Santayana

concentrates on the use of immediate experience as a “foreground” imposed on nature. McGilvary, on the other hand, concentrates on the distinction between “objects”–before-they-are-experienced and “objects”–after-they-are-experienced.

How best can Dewey’s response be articulated? I want to start by discussing two significant concessions made by Dewey in response to criticisms from Santayana and McGilvary, but I will argue that these neither render Dewey’s original position inconsistent nor make it an anti-realist position but merely offer a much needed chance for Dewey to further clarify his views. After this, I will discuss Dewey’s response to the contention that “immediacy” is an epistemological category and not a metaphysical category as used by Dewey.

Dewey agrees that his position was rightly described by Santayana as creating a kind of foreground in nature:

The significance of experience as foreground is that the foreground is of such a nature as to contain material which, when operationally dealt with, provides the clues that guide us straight into Nature’s background and into nature as background. If philosophical writers would and could only forget their own dominating foreground of mentalistic psychological interpretation of experience, the historic course of the experiential development of the sciences out of experiences of the sort found among savage peoples would suffice to prove that experience is in fact of this sort. The proof will be reinforced by noting what happens whenever out of experiences previously had there develops a new experience based upon and containing juster and deeper cognitive insight into the world in which we live (J. Dewey, 1939, p. 533).

In my own interpretation of Dewey, I think the concession here is more epistemological than ontological.⁴⁰ Dewey is only using the “foreground” as a *heuristic device* to show how experience offers much needed ways of knowing the generic traits in reality. The use of the word “foreground” is “operational” and is not about any attempt to graft anything unnatural onto nature. While Santayana is interested in how to link the use of “foreground” of the immediate experience

⁴⁰ It seems to imply that admitting that the concession being discussed at this point is epistemological rather than ontological indicates that Dewey has a very tough nut to crack in any attempt to articulate a consistent epistemology as corollary to his naturalistic metaphysics. But in my next chapter, I will state and explore the argument that this is not the case.

to the human subject to create *a gulf between his experiences in nature* and nature itself, Dewey would like to attach the concept of foreground to his concept of “doing” and “action-going” which portrays an unbroken continuity and symbiotic relation between the actor, his actions on nature, as part of nature and in nature. With this explanation of what Dewey meant by “foreground”, Santayana’s criticism loses its bite.

The second concession is that Dewey agrees with Santayana that there is a kind of circularity involved in his position. Dewey explains that what he meant was that “everything immediate emanates from something biological” (J. Dewey, 1939, pp. 533-534). Is this circular? Yes, Dewey was sincere enough to admit that it is. This is because in any attempt to explain what immediate experience is, we are directed to biology and vice versa. However, my contention is that the circularity is not vicious. In the words of Nicholas Rescher, “what is involved here is not the vicious circularity of definitional question-begging but the virtuous circularity of an explanatory feedback loop” (Rescher, 2007, p. 31). It is arguable that no concept is left hanging, unexplained. Sticking to our terminology, it is defensible to say that biology provides the “epistemological foreground” for the analysis of what “immediate experience” is.

However, McGilvary’s objection to Dewey’s use of the word “object” seems to be more fundamental than Santayana’s criticism of Dewey’s use of “foreground”. According to Boisvert, in McGilvary’s objection, Dewey was interpreted as using “objects” to mean something created through experience. It follows from this interpretation that the existence of beings and the world itself will depend upon experience (Boisvert, 1988, p. 58). Boisvert rightly noted that McGilvary was exploiting Dewey’s failure to make explicit his distinction between “things as existent” and “things as experienced” (Boisvert, 1988, p. 60). However, it is arguable that Dewey was cautious of being misinterpreted as subscribing to the traditional distinction between appearance and reality, which he keenly abhors.

However, one reminder is useful at this point. Dewey made a distinction between the subject-matter of experience and the object of scientific reflection (Margolis,

2004, p. 141). The constituents of the world that human beings come in contact with when human transactions take place are the subject-matter of experience. The objects of scientific reflection, on the hand, are these same objects of experience, but in refined form. Their “refinement” is in terms of attaining new signification through regulated and reflective analysis. For Dewey, water attains new signification when conceptually presented as H₂O but it is only conceptually different from water. It is important to note that Dewey used words such as “subject-matter”, “objects”, “mediate” and “immediate” in radically new ways that lead his readers (and critics) to interpret his stipulatively defined concepts in erroneous ways. Anyone who misses this is bound to make a parody of Dewey’s philosophy. Dewey made a distinction between primary and secondary experience and more importantly between subject-matter of primary experience and object of secondary experience, as awkward as it reads (J. Dewey, 1925, pp. 1-36; 1939, p. 532), . The subject-matter of primary experience (which are realities that are not created), engenders qualitative experience between organism and environment (in which things are had, used and enjoyed). This is what Dewey meant by saying that “experience is the manifestation of interactions of organism and environment. Dewey pointed out that it is fallacious to think that because he claims that experience is immediate in its existence, its subject-matter must be immediate” (J. Dewey, 1939, p. 532).⁴¹

Now we come to Santayana’s second contention that “immediacy” is an epistemological concept rather than metaphysical as supposed by Dewey. To understand the vehemence that Santayana put into this objection, we need to understand the background. The history of the distinctions between *mediacy* and *immediacy* in mainstream philosophy shows that it has had only one interpretation which is epistemological. For instance, John Locke identified sensations and reflections as sources of human ideas. However, he distinguished the ideas we get from sensations and reflections in terms of degrees of clarity. He

⁴¹ McGilvary’s types of objections were arguably actuated by Dewey’s “stubbornness” in using old words in new ways in spite of his awareness of the meanings that are tenaciously attached to them. I argue that Dewey’s use of non-cognitive experience (as a synonym for immediate experience) is less controversial.

described the ideas we get from sensations as providing the clearest of all forms of knowledge. The clarity of this form of knowledge, according to him, lies in fact that *the mind is presently filled with the light of such ideas*. By “presently”, he was referring to the spontaneous way the ideas are received through sense-contact with the world. This mode of receiving these ideas and their epistemic worthiness are contrasted with ideas we get as conclusion or consequences of a process described as systematic reasoning (Locke, 1952, p. 309). A good example is my direct awareness of the pain in my leg that can be contrasted with my acceptance of the idea that bats have physiological properties that qualify them as both mammalian animals and birds- the former idea is immediately known while the latter is mediately known.

More recently, Laurence Bonjour made a similar distinction between direct and indirect awareness but in terms of factors that an epistemic agent can appeal to when justifying a belief. According to him, there are factors that an agent has exclusive and direct cognitive access to, such as thought, state of mind and functioning of senses (internalism) and factors that an epistemic agent has indirect cognitive access to that are outside, such as social norms, rules, paradigms, and so on. The former factors that are designated as “direct” are regarded as “internal” and the latter designated as “indirect” are external (Bonjour, 1994, p. 132). The “direct factors” are ones that we are mediately aware of in terms of spontaneity while the “indirect factors” are ones that we are immediately aware of because they involve a process of systemic reasoning. The most salient fact inherited from the history of philosophy about the distinction between immediacy and mediacy is that it is an epistemological distinction. It is based on how we come to know. This is the tradition that produced both Dewey and Santayana.⁴²

⁴² How did Santayana miss the crucial point in Dewey’s use of immediacy and mediacy? His objection seems to rest on his mistrust of the tradition or culture from which Dewey emerged. He appears to be bent on attaching Dewey’s philosophy (and the “misrepresentations of reality” that he believes it portrays) with the tradition and mentality of the Americans which he caricatured as “philosophy of enterprise” or “monopoly of material activity” (Santayana, 1951, pp. 248, 252). Most critics (and apologists) of Dewey have attributed whatever problems they have discovered in Dewey to the “tension” between his Hegelian background, the influence of Darwinism and his adoration for scientific knowledge (T. M. Alexander, 1987, pp. 15-17, 57-118; Boisvert, 1988, pp. 5,46; Campbell, 1995, p. 25; Margolis, 2002, p. 112). Although, this attribution appears to be more

I think one can conclude that it is difficult to identify Dewey's position on reality with any of the standard versions of realism.⁴³ It is also equally difficult to identify him as anti-realist. It is a fact that identifying him as an idealist will irreparably render his position inconsistent in respect of his naturalism and empiricism. However, Dewey's conception of reality is not an idealist position for several reasons. Firstly, the descriptions of the "traits", characters and events that characterised his notion of reality and more importantly his descriptions of how reality can be manipulated, are consistently in physical (or material) terms. Secondly, his description of the complementary relationship between science and metaphysics suggests that both are empirical disciplines. Finally, his insistence that only an empirical approach can guide to the discovery of the knowledge of this reality also suggests a position that is not idealism. Consequently, I suggest that Dewey's position "transcends" realist/anti-realist dichotomies and labelling.

2.6 Chapter summary

In this chapter, I have explored how Dewey developed his version of metaphysics from his theories of experience, reality and human mind. I have identified his interest in a version of metaphysics that is empirical. Also, I have explored his attempt to establish a metaphysics that is continuous with traditional metaphysics, on one hand, and compatible with science, on the other hand. I have established that the construction of Dewey's metaphysics was strictly based on his naturalistic views which include the ideas that the human species are inseparable parts of nature, that their experiences are transactions with nature and that reality is an instrument to be manipulated for the survival of the human species.

In Section One, I explored how Dewey offered a radical conception of human experience, as an alternative to the traditional views. I discussed how he rejected the conception of human experience as essentially a mode of knowing nature in

historically evident and less- speculative than Santayana's suggestion, it is arguable that Dewey's position is defensible.

⁴³ The only way of classifying Dewey's positions as realist is to identify him with positions such as idealist-realist, material-realist, and materialist-idealist.

traditional metaphysics and replaced it with the conception of experience as human transaction within nature. Exploring Dewey's principal argument that nature is experienced whenever any human experience takes place, I discussed Dewey's distinction between primary and secondary stages of human experience and their ontological connotations. I discussed Dewey's explanation that primary experience marks the point when the human species has raw encounters with nature in terms of having, using and enjoying things in nature. The secondary experience marks the stage where human species manipulate nature by re-arranging and reproducing its constituents. I also discussed how Dewey used the concepts of "immediacy" and "mediacy" to correspond to the primary and secondary stages of experience, respectively.

Several objections to Dewey's theory of experience were examined. Most of these objections alleged that his conception of experience is vague. One expression of this vagueness is that Dewey failed to distinguish between what a knower is consciously aware of (human experience) and what nature actually or objectively is. This objection is usually raised by critics in their contention that Dewey is better classified as an idealist rather than realist. One response to this objection explored in this section is that critics have confused the traditional conception of experience as a mode of knowing with Dewey's conception of experience as an account of human transaction within nature, while the former is ultimately epistemological the second is primarily ontological. However, I noted that a critique of Dewey's theory of experience cannot be performed in isolation since it is extricably intertwined with his theory of reality and his version of naturalism.

In Second Two, I focused on how Dewey rejected the conception of reality as single, stable and static that is predominant in traditional philosophical settings and replaced it with a conception of reality that is dynamic and pluralistic. In this section, I explored Dewey's two strongest claims for his theory of reality. The first claim is that human experience has shown the traits of existence to be both precarious and stable. The second argument is that evolutionary theories do not favour the kind of single, uniform and static reality propounded by traditional metaphysicians. However, I noted the problem inherent in the attempts to locate

Dewey's notion of reality within the ontological theories provided by modern and contemporary philosophers. The problem is that Dewey's position cannot be categorised in terms of the well-known orthodox versions of realism such as naïve realism, metaphysical realism or scientific realism. He is a realist in the sense that he admitted the existence of physical reality. He rejected all forms of theory of reality usually described as transcendental or beyond the physical world.

However, in his naturalist position that the human species is part of nature, his realism is different from metaphysical realists who claim that a mind-independent world exists. Similarly, his contention that science selectively pursues subject-matter for scientific investigations, leaving out issues that define non-cognitive human experience (such as emotion, esthetic feelings, magical experience, and so on), renders his position different from scientific realists who believe in the omniscience of science. I concluded the exploration of Dewey's position by noting that it transcends the conventional dichotomies between idealism and realism, on one hand, and between various versions of realism, on the other hand.

Several objections were critically examined, most of which spill over from the critique of his theory of experience. One of the strongest is that Dewey has reduced reality to what a knower experienced immediately. Santayana succinctly presented this objection in terms of creating a foreground for nature, whereas in reality, there is no "before" and "after". The implication is that Dewey is a surreptitious idealist and an anti-naturalist. Another strong objection is that Dewey equated human experience with reality and consequently must account for realities that are unexperienced or in-experience-able by human beings. The point of this objection is that human experience is not commensurable with reality. Another objection is that he reduced reality to a process.

I explored Dewey's responses to these objections. Firstly, for Dewey, the fact that science (evolutionary biology) admits that nature is evolutionary justifies his claim that nature is not static. In addition, I explored Dewey's explanation that nature and (or) experience is an unbroken process or a continuum. The implication is that there is no need for an experiencing agent or a knower for there to be reality.

However, whenever or wherever there is a reality which includes human beings, human experiences would be about nature. Furthermore, I explored the meanings of “immediacy” and “mediacy”, construed in ontological terms by Dewey to underscore the point that his naturalistic metaphysics do not reduce reality to what a knower immediately and subjectively experienced. “Immediacy” for Dewey, is a radically new term depicting non-cognitive or pre-theoretical human transaction within nature.

The argument pursued in this chapter is that there are notable unprecedented contributions in Dewey’s naturalistic metaphysics such as his unique analysis of aspects of human experience such as immediacy, qualitative and non-cognitive aspects of experience, “problematic situations”, pluralistic facets in reality and many other themes. His attempts to redefine metaphysics in a way that is distinct as well as amenable to science, and his success in identifying science as continuous with ordinary human transactions with the physical world are also notable. However, I observed that most of his critics have argued that his subscription to a thoroughgoing naturalism is suspect on the ground that his overall position implicitly engenders idealism. On the contrary, I argued that Dewey could not have succeeded in connecting several themes in his overall philosophical position such as experience, pluralism, social and functionalist theory of human mind, and radical empiricism unless he subscribed to a version of naturalism and realism.

Again, while it is evident that there are many issues in Dewey’s philosophy that appear to be ambiguous because of his style of language and aggravated by his insistence on using old concepts in radically different ways, I established the plausibility of how he constructed a metaphysics from his theories of experience, reality and the social nature of human mind. His naturalistic metaphysics concerns itself with human transactions within nature and comes up with questions about how to manipulate or restructure nature for human survival. The primacy of transaction (and necessity of solving the problematic situations that is entailed in it) makes naturalistic metaphysics the field that furnishes the subject-matter for science, epistemology and every other cognitive field from which solutions are envisaged. Consequently, naturalistic metaphysics is regarded as the foundation

for every human cognitive pursuit. However, this “foundational role” is not necessitated by the kinds of argument depicting the “supremacy of reason over the senses” that characterised Cartesian “first philosophy”.⁴⁴ It is also different from the argument usually meant to present philosophy as superior to science by virtue of some special subject-matters that are supposed beyond the scope and methods of the sciences.⁴⁵ However, constructing metaphysics from the naturalist conception of experience, Dewey hopes to develop a metaphysics that is continuous with traditional metaphysics, but in a naturalistic setting.⁴⁶

Given these clarifications of Dewey’s philosophical position, I argued that he offers a substantive and “empirical” metaphysics and that he is not merely proposing a new philosophical methodology. The most informative coinage in his metaphysics is “the traits of existence”. And he was not merely enumerating traits as his critics interpreted his preoccupation. According to Shook, “Dewey’s mature philosophy retained the term metaphysics to cover empirical inquiry into traits common across all experience and hence across all multifarious modes of knowing as well” (Shook, 2002, p. 101). Sleeper simplifies Shook’s claim about Dewey by saying that “Dewey’s motive is to communicate the connection of things in experience with things in existence” (Sleeper, 1986, p. 116). More fundamentally, Dewey’s naturalist metaphysics is arguably a continuation of the “old” metaphysics in spite of its differences in methodological approach, re-orientations on issues and new non-reductive alignment with science.⁴⁷ His metaphysics seems to match perfectly

⁴⁴ Philosophers such as Penelope Maddy have contrasted naturalism with “first philosophy”. The approach, usually, is to contrast the differences in what both traditions regarded as the subject-matter and methods of metaphysics in relation to other cognitive fields such as science (Maddy, 2007).

⁴⁵ For instance, the study of being qua being in traditional metaphysics is believed to be beyond empirical science.

⁴⁶ For instance, it is evident in Dewey’s *Experience and Nature* that the traditional interest in metaphysical issues such as knowing the nature of reality, human nature, human mind, and inquiries concerning other metaphysical questions, are preserved, but the approach became naturalistically transformed by locating the natural problematic situations that generate inquiries and concerns about possibility of solutions.

⁴⁷ In this regard, his view on metaphysics is radically different from the view of mainstream philosophers such as Hume, Kant and the Positivists who at various times have called for the elimination of Metaphysics because its propositions are sophistries, impossible and nonsensical, respectively. His position is also different from the position of philosophers from the Pragmatist tradition such as Peirce (1934a, p. 282) and Quine (1994a, p. 18) who have suggested that metaphysical questions are best answered through observational methods of science. However,

Bradley's description of what a substantive metaphysics should be, insofar as it is still an attempt "to comprehend the universe, not simply as piecemeal or by fragments, but somehow as a whole" (Bradley, 1893, p. 1).

However, several concessions are noted in this chapter that seem to justify the impression that if Dewey's metaphysics is regarded as a success, it is at the expense of the possibility of his having a consistent or meaningful epistemology. We have seen how Murphy argued that based on how Dewey conceptualised and used the concept of immediacy in his philosophy there is unavoidable tension between his type of metaphysics and any theory of knowledge that can be presented to correspond to it. Gale seems to be arguing that a relativist epistemology is all Dewey could get given his use of the notions of precariousness and stableness. Campbell argues that Dewey's notion of non-cognitive experience is spurious as it is not possible to have a conscious experience without reflection and the occurrence of reflection is an indication that a process of knowledge has been initiated. Consequently, a Deweyan theory of knowledge that could correspond to his naturalistic metaphysics is necessary to make his philosophy in general a real success. This is what I hope to achieve in the next chapter.

two facts are noteworthy about this claim. First, while fragment 5.423 in Peirce's volume 5 evidently shows his preference for science over metaphysics, his discussion of "scientific metaphysics", especially the categories of Firstness to Thirdness in Volume VI seems to indicate a reversed opinion (Peirce, 1934b, p. 25). Maybe the best thing to say about Peirce is that there is a type of metaphysics he favours and others that he rejects. Second, it should be noted that Quine's view on metaphysics that is expressed here, is a subtle one. It may be inferred from his assessments that Russell's *Our Knowledge of the External World* and Carnap's *Der logische Aufbau der Welt* were monumental failures. These are classics of the genre of metaphysical discourse.

Chapter Three:

A critique of Dewey's epistemological naturalism

3.0 Introduction

In this chapter I explore the version of epistemology (theory of knowledge) in Dewey's naturalism. His position has been described as "epistemological naturalism" because of his contention that the knowing process is a natural event to be empirically studied like any other natural events such as rainbows, earthquakes, and erosion. I discuss how this view differentiates his epistemology from traditional epistemology and other positions such as Quine's naturalized epistemology. For instance, while most traditional epistemologists are concerned with establishing necessary and sufficient conditions to demonstrate the possibility of knowledge, Dewey sees knowledge demonstrated in every successful human transaction within nature. Consequently, I argue that the traditional concern about the possibility of knowing is replaced with a concern about the possibility of knowledge 'transforming reality' as envisaged by Dewey. In addition, while naturalists such as Quine arguably see epistemology as dependent on scientific knowledge (1994a), Dewey sees all forms of knowledge (scientific knowledge, philosophical knowledge, technical knowledge, magical knowledge and so on) as complementary. I discuss how Dewey's view is rooted in his contention that all human cognitive endeavours (science, epistemology, logic, fine arts) have their roots in problematic human transactions or symbiotic relations with nature.

This chapter focuses on three broad aims. Firstly, I discuss how Dewey's theories of knowledge and reality entail one another. Specifically, I discuss how his notion of reality provides a road-map for the conceptions of knowledge, truth, and justification that characterise his epistemology. I explore how this mutual relationship is corroborated by Dewey's apologists (Archie, 1958; R. E. Dewey, 1977, p. 142), . More importantly, I explore how this mutual entailment refutes the claim made by some critics that the nature of the metaphysics presented by

Dewey forecloses the possibility of establishing a consistent and substantive epistemology within his naturalistic philosophy (Gale, 2010a, p. 10; Murphy, 1951, p. 221; Santayana, 1951, pp. 251-252).

Secondly, I explore the continuity between Dewey's naturalistic epistemology and traditional epistemology in terms of how he accepts some of the preoccupations of traditional epistemologists as genuine but proposes naturalistic foundations for analysing those concerns and offers a naturalistic methodological approach for solving them. I focus on traditional concerns such as defending the importance of normativity in epistemology, identifying the attainment of truth and avoidance of errors as one of the goals of epistemology, the social nature of knowledge and the significance of doubt and sceptical challenges.

Thirdly, I articulate how Dewey aimed to establish a general notion of knowledge rather than a notion within the context of epistemology (philosophy) alone. Although he takes scientific knowledge as a paradigm, I argue that Dewey's conception of knowledge cuts across all cognitive disciplines (epistemology, morality, science, technology, arts, drama, politics, magic, and so on). This view was discussed as a consequence of his contention that all cognitive inquiries are inherently motivated by problematic situations and are resolved when controls are effected.

This chapter has four sections. In the first section, I discuss how Dewey presents his naturalist metaphysics as a road-map for epistemology. This feature underscores his point that metaphysics is inseparable from epistemology and offers a challenge to philosophers (such as Hume, Kant and the positivists) who have argued for the rejection of metaphysics without considering a corresponding rejection of epistemology. In the second section, I explore Dewey's critique of traditional epistemology. I discuss his contention that most of the problems of traditional epistemology are consequences of obsolete assumptions about the nature of knowledge (J. Dewey & Bentley, 1949, p. 47), the use of non-empirical methodologies (J. Dewey, 1925, pp. 1-36) and appeals to some kinds of non-naturalistic metaphysics. However, I discuss his acknowledgement that some of

the problems are genuine, if what motivated them is naturalistically approached. This view has been interpreted to mean that his naturalistic epistemology is essentially about reconstructing traditional epistemology.

I start the third section by discussing Dewey's critique of traditional methodologies such as the use of analysis, intuition, and argumentation, which he described as non-empirical. His contention that these non-empirical methods led to many pseudo-problems is examined. I discuss the alternative method he proposes which is the denotative empirical methodology (DEM). In addition, I examine his claim that the use of denotative method invariably involves the use of hypotheses and experimentation. Most importantly, I explore what it meant, in Dewey's view, for a method to "denote", and how he uses this "function" to underscore the uniqueness of this philosophical method. The importance of this function in Dewey's conception of inquiry and contention that knowledge is practical is discussed. In section four, I discuss Dewey's instrumentalist and experimentalist conceptions of knowledge, as consequences of his rejection of the Spectator Theory of Knowledge. More importantly, I explore how through these conceptions he establishes the nature and usefulness of knowledge and how a claim to knowledge can be justified.

3.1 Dewey's conception of metaphysics as a ground-map for naturalistic epistemology and its consequences

This section reviews two popular views about the connection between Dewey's metaphysics and epistemology. On one hand, we have some philosophers who have noted that the only way to comprehend Dewey's entire philosophy is to understand that his theory about reality (metaphysics) and his theory about knowledge and truth (epistemology) are two inseparable aspects of his naturalism (Archie, 1958; R. E. Dewey, 1977, p. 142; Neubert, 2009, p. 29). On the other hand, for critics, such as Gale, certain ontological claims that Dewey emphasised in his metaphysics foreclose the possibility of a substantive and consistent epistemology within his naturalistic philosophy (Gale, 2010a, p. 10). For Murphy, Dewey used the concept "Experience" in two incompatible ways, as "the essential link between

man and a world which long antedates his appearance in it” and as: “the terminus of all knowing, in the sense that all our cognitive claims refer ultimately to what experience will show itself to be in a ‘resolved’ situation and to nothing else” (1951, p. 221). Consequently, Murphy concludes that if Dewey’s metaphysics is true, his epistemology must necessarily be false. For Santayana, Dewey’s metaphysical conception of nature is anthropocentric, so that any Deweyan epistemology must be either a subjectivist *epistemology* or a *non-epistemic theory of knowledge* (Santayana, 1951, pp. 251-252).⁴⁸ The suggestion from these critics is that Dewey’s metaphysics and epistemology are not only clearly distinct but better separated.

However, the position that I maintain throughout this section is that if these two components of his naturalism are separated or one is denied, the overall framework of his philosophy will become inconsistent and characterised by unresolved internal problems. Consequently, I contend that most misinterpretations and criticisms of Dewey’s naturalistic philosophy came about because of the failure of critics to understand his conception of the relationship between epistemology and metaphysics. I start the discussion with Dewey’s contention that knowledge is a natural event and then proceed to discuss how he uses this claim to link his naturalistic metaphysics with his naturalistic epistemology, most especially in the sense in which the former provides a road-map for the latter.

3.1.1 Knowledge as responses to natural conditions and modes of interaction

In *Knowing and the Known*, Dewey and Bentley contend that both reality and the process of knowing should be “given transactional observations”(J. Dewey & Bentley, 1949, p. 88). What does this mean? “Transaction” is Dewey’s special coinage for human activities purposely meant to manipulate or re-order nature. The practical and physical nature of these activities is expressed in Dewey’s reference to them in terms of “making and doing” (J. Dewey, 1930, p. 10).

⁴⁸ By a “subjectivist” or “relativist” epistemology, I think they meant ‘something’ non-substantive or a parody of what epistemology should be.

Consequently, by describing the human-reality relationship as “transactional”, Dewey meant to emphasise how reality impacts human species and how, in return, the human beings physically alter or manipulate nature for survival. We have discussed this relationship as symbiotic in chapters 1 and 2. In what sense can knowledge be regarded as “transactional”?

According to Dewey, “knowledge” is doing and making “which has intelligent direction”. This intelligent direction is explained in terms of taking *cognizance of condition, observing relations of sequence and executing in the light of some purposes* (1930, p. 37). What are these purposes? How are they determined? In *Logic: The Theory of Inquiry*, Dewey writes:

Upon the biological level, organisms have to respond to conditions about them in ways that modify those conditions and the relations of organisms to them so as to restore the reciprocal adaptation that is required for the maintenance of life-functions. Human organisms are involved in the same sort of predicament. Because of the effect of cultural conditions, the problems involved not only have different contents but are capable of statement as problems so that inquiry can enter as a factor in their resolution. For in a cultural environment, physical conditions are modified by the complex of customs, traditions, occupations, interests and purposes which envelops them. Modes of response are correspondingly transformed (J. Dewey, 1991, p. 66).

The point in this passage is that knowledge is a response to certain conditions in human transaction within nature. As “intelligent directives”, knowledge is the mode of interacting with nature. The notion of “intelligence” is in terms of certain human goals (such as survival and aspiring to a more comfortable life) and pragmatic evaluations of means of attaining them. We have discussed Dewey’s notion of “metaphysics” in terms of human transactions with nature in Chapter 2. We also identified and discussed two significant levels of interaction in that chapter: the level at which there are direct contacts between human species and nature (in which things are had, used, and enjoyed) and the level at which individuals and their complex relationships define a society. We concluded in that chapter that problems encountered in individual human transaction within nature (primary experience which involves minimum levels of reflection) lead to socially motivated and regulated systematic reflections and inquiries (which is secondary

cognitive experience) and that the success of inquiry is determined in terms of how the understanding of the objects of primary experience are enlarged and how the problems emanating from them are resolved. It is in this sense that Dewey contends that epistemological discussion depends upon “discourse” in metaphysics (1925, p. 117). Epistemological inquiries start when questions are generated within the course of human existence (transactions) and the outcomes of these inquiries are determined in terms of their impacts on human existence (1991, p. 30).

From Dewey’s naturalist position, metaphysics provides a road map for epistemology in terms of how features of inquiry, knowledge and justification are determined. Dewey presents an empirical metaphysics in terms of how nature constrains humans to act in certain ways. For Dewey, the most appropriate modes of response (inquiry) to these constraints are empirical. From Dewey’s position that reality is dynamic, knowledge concerning reality also becomes dynamic. Differences in cultural environments and physical conditions become contextual parameters through which “modes of response are correspondingly transformed”. From this view, knowledge is practical, contextual, and dynamic. In addition, given Dewey’s view that problematic situations actuate inquiries, it follows that the justification of any claim to knowledge can only be determined in terms of how those problems are resolved. Consequently, practical and pragmatic considerations become indispensable in Dewey’s notion of justification. This is the basis for Dewey’s instrumentalist conception of knowledge. I now discuss how Dewey used his conception of the relationship between metaphysics and epistemology as a ground for his extensive critique of the preoccupations of traditional epistemologists.

3.2 Dewey’s critique of traditional epistemology

In this section, I discuss Dewey’s critiques of some traditional conceptions of the nature, scope, methodology and goals of epistemology. I explore these critiques as consequences of his conception of metaphysics as a road map for epistemology. The exploration has two dimensions. Firstly, I discuss Dewey’s rejection of the

impression in the works of some traditional epistemologists that epistemology can be done without metaphysics. Dewey targets traditional epistemologists who conceived the field as *a priori* and epistemologists such as Kant, Hume, and the positivists, who believed that metaphysics can be rejected without any effect on epistemology. Secondly, I discuss how Dewey critiques the kind of metaphysics that some traditional epistemologists have “conceptualised” as foundation of epistemology. A good example is the transcendental metaphysics endorsed by several traditional epistemologists.

More substantively, I discuss Dewey’s critique of epistemology as a series of responses to universal scepticism, his critique of the traditional conception of epistemology as independent of science and the goal of epistemology in terms of the acquisition of knowledge for knowledge’s sake.

3.2.1 Dewey’s critique of epistemology without metaphysics

For Dewey, the idea that questions about knowledge can be raised and answered as a matter of dialectical definition implies that knowledge is *a priori* and thus epistemology can be done without any reference to what goes on in the external world. Noting the prominence of this presupposition in traditional epistemology, Dewey writes:

Epistemology starts from the assumption that certain conditions lie back of knowledge. The mystery would be great enough if knowledge were constituted by non-natural conditions back of knowledge, but the mystery is increased by the fact that the conditions are defined so as to be incompatible with knowledge. Hence the primary problem of epistemology is: How is knowledge *uberhaupt*, knowledge at large possible? Because of the incompatibility between concrete occurrence and function of knowledge and the conditions back of it to which it must conform, a second problem arises: How is knowledge in general, knowledge *uberhaupt*, valid? (J. Dewey, 1965, pp. 97-98) .

Dewey claims that epistemologists from the traditional to modern era have shown interest in questions such as: What is knowledge? How is knowledge different from belief? Dewey sees these questions as reasonable but argues that they cannot be answered independent of concrete human situations. From this point of view, Dewey is challenging dialectical or conceptual epistemology. In Plato’s

dialogues, the “Socratic tradition” of engaging one another in the art of defining epistemological concepts such as knowledge, belief, truth, and justification was established. This dialectical tradition is also noted in the modern philosophical works of Hegel such as *Phenomenology of Spirit* (PS) popularly described as his epistemology (Hegel, 1997). In PS, Hegel presents two opposing definitions of consciousness and of the objects of consciousness as a way of presenting the development of his philosophical view. Elsewhere, he described this engagement as a “speculative mode of cognition”(1991, p. 10). The fact that this type of engagement defines a method, a tradition, and a conception of epistemology is made evident by the fact that philosophical positions on issues and ideas about the nature, scope, methods, and goals of epistemology are made through them.

In his *Essay Concerning Human Understanding*, John Locke identifies linguistic and conceptual analysis as the major way that epistemologists can meaningfully contribute to the growth of scientific knowledge- as ‘under-labourers’ saddled with responsibilities of removing some of the rubbish that lies in the way of knowledge (1952). In analytic philosophy, Gilbert Ryle is noted for his attempt to refute scepticism through conceptual analysis. Ryle’s argument is known as the ‘polar concept argument’. It states that the sceptics must admit that the existence of genuine knowledge is implied in their claim that genuine knowledge is not possible- just as if there are no genuine coins there cannot be counterfeit coins.⁴⁹ A critical study of the interchange between Edmund Gettier, his apologists and his critics in the prolonged and recurring debate whether the traditional three conditions of knowledge (belief, truth, and justification) are sufficient for knowledge, seems to provide another analysis of knowledge with only hypothetical references to concrete human situations. More specifically, it provides an example in which knowledge and truth are strictly identified as logical properties of propositions.⁵⁰ All these instances, from Dewey’s view, seem to

⁴⁹ See Gilbert Ryle, 1960. *Dilemmas*, Cambridge: Cambridge University Press. See also similar argument in Grayling, A.C. (1995). “Scepticism” in Grayling A.C. (ed.) *Philosophy: A Guide through the Subject*. Oxford: Oxford University Press.

⁵⁰ For instance, in Edmund Gettier’s second counter-example, the concept of truth and knowledge were treated exclusively as a matter of “logical entailment” between two disjuncts in a disjunctive proposition; Either Jones owns a Ford, or Brown is in Barcelona (1963, pp. 121-123).

imply that epistemology can be done without any need to appeal to metaphysical theories about the world.

What exactly is the nature of Dewey's disagreement with this tradition? Is he arguing that analysing, defining, or determining the meaning of epistemological concepts is wrong? His argument is that we cannot separate epistemological issues from everyday human experience in which lies its origin and value. That when we define any epistemological problem or concept, it must be done "not simply for reflective philosophy or in terms of epistemology itself, but in terms of what is its meaning in the historical movement of humanity and as a part of a larger and more comprehensive experience" and as a problem "*which social life, the organized practice of mankind, has to face*" (J. Dewey, 1965, pp. 273-274). For him, when this historical context is ignored and technical or "intellectual" definitions are provided a priori, what will ensue is a kind of epistemology that is abstract and speculative- the kind that has misled traditional epistemologists into attributing non-natural features and conditions to knowledge (J. Dewey, 1925-36). Dewey rejects some popular notions about knowledge in traditional epistemology such as the claims that certainty is an indispensable feature of knowledge (1930) and that knowledge is strictly a mode for "grasping or beholding reality" (1930, p. 188). He also rejects how traditional epistemologists regarded and the way they defined "objectivity" (objective knowledge) in terms of knowledge that is independent of the knower's interests, feelings, and judgement, a position that in Dewey's critique, renders knowers as "spectators". He argues that there is no way these notions could have been derived from the natural conditions from which the quest for knowledge emanates. He also argues that dialectical epistemology in Hegel's work can only produce new and strange conceptions of logic and God (1925, p. 45).

I think Dewey's point is that, just as a technologist can analyse and discuss the "blueprint" of a novel machine he wants to build in his head, philosophers thought that they could also discuss the nature or features of knowledge independently of a metaphysical theory about reality. Dewey specifically cited Kant as one of the examples of philosophers who "called upon philosophers to cease their discussion

regarding the nature of the world and the principles of existence until they have arrived at some conclusion regarding the nature of the knowing process” (J. Dewey, 1965, p. 271).⁵¹ Describing Kant’s notion of knowledge as “self-sufficing purveyor of reality” Dewey criticises the character of the entire Neo-Kantian movement as lying in the assumption that “knowledge gives birth to itself and is capable of affording it its own justification” (J. Dewey, 1965, pp. 297-298). However, Dewey contends that this approach has produced several conflicting notions of knowledge and truth and several controversial conditions for attaining them. For Dewey, the failure of this epistemology is made evident by the fact that it becomes reasonable to doubt the possibility of knowledge and deny any relationship between epistemology, common sense, and science.

At a glance, one natural response to Dewey’s contention as stated above is to see it either as outright false, or as an exaggeration. It seems that metaphysical foundations have always served as points of reference for every traditional epistemological claim. The point is that it is arguable that references to concrete human situations are hypothetically made. For instance, the contrast between a knower and someone with a mere true belief in the analogy of “the road to Larissa” in Plato’s *Meno*, seems to be an acknowledgement of how changes in concrete human affairs can create a huge difference between a knower and a believer. In many other cases, metaphysical theories were actually discussed in relation to their epistemological theories. For instance, from Plato’s theory and analysis of the world of Form and Ideas, a conception of an object of knowledge that is certain, unchangeable, and perfect became entrenched. In addition, the distinction between what has the features of the Forms (knowledge) and what has the features of Idea (belief), became established. Similar distinctions are found prominently in Aristotle’s conceptions of the Universal and Substance. In this

⁵¹ In his *Prolegomena to any future Metaphysics*, Immanuel Kant made the declaration that “All metaphysicians are therefore solemnly and legally suspended from their occupations till they shall have answered in a satisfactory manner the question, ‘How are synthetic cognitions a priori possible?’ For the answer contains the only credentials which they must show when they have anything to offer in the name of pure reason. But if they do not possess these credentials, they can expect nothing else of reasonable people, who have been deceived so often, than to be dismissed without further ado” (Kant, 1996, pp. 47-48).

regard, one can argue that if any position in traditional epistemology implies that epistemology can be done without a metaphysical presupposition, it is a matter of “default” rather than design. In section 3.2.2, I explore Dewey’s critique of the metaphysics of Plato and Aristotle as “un-naturalistic”.

However, I think Dewey is right when we consider the positions of some philosophers such as Hume⁵², the logical positivists⁵³ and Quine⁵⁴, who have suggested the rejection of metaphysics. All these philosophers seem to see epistemology as distinct and distinguishable from metaphysics. More importantly, they seem to believe that the rejection of metaphysics cannot have any effect on epistemology. However, one may argue that the rejection of metaphysics by these philosophers does not imply the rejection of all theories of existence or reality. For instance, it is arguable that Hume, Quine, and the logical positivists rejected metaphysics based on the speculative and unempirical nature of its propositions which resulted in unverifiable claims. It is also arguable that Quine, for instance, was against the kind of indubitable and logically firm “metaphysical foundations” that traditional metaphysicians thought they could provide for science. According to Quine, the metaphysicians hoped to provide a *non-scientific foundation for science*, to avoid the problem of circularity that will ensue if one should justify science by science.⁵⁵

My position is that Dewey is right in a sense; that ancient Greeks did epistemology and metaphysics together, but they were sundered after this period.

⁵² Hume referred to metaphysics as containing nothing but sophistry and illusion in his *An Enquiry Concerning Human Understanding* (Hume, 1748, p. 166).

⁵³ In Ayer’s *Language, Truth, and Logic* and Rudolf Carnap’s *Philosophy and Logical Syntax*, Hume’s suggestion that metaphysics should be rejected, was endorsed. The logical positivists generally declared metaphysical propositions as meaningless because, according to them, they cannot be empirically verified; both in actuality and in principle.

⁵⁴ In his project of naturalizing epistemology which involves the ‘separation’ of epistemology from its supposed metaphysical foundation, Quine described it as the “dislodging of epistemology from its old status of first philosophy” (Quine, 1994a, p. 28).

⁵⁵ W.V.O Quine rightly captures the fear of the traditional epistemologists about circular reasoning when he writes about their concern that “If the epistemologist’s goal is validation of empirical science, he defeats his purpose by using psychology or other empirical science in the validation” (Quine, 1985, p. 19). However, for Quine, given the fact that “science cannot be deduced from sense data”, he concludes that “the hopelessness of grounding natural science upon immediate experience in a firmly logical way was acknowledged” (Quine, 1985, p. 18).

Consequently, I argue that what Dewey has in mind is that post-Greek traditional epistemologists have shown more interest in the analysis of concepts and arguments we employ in epistemology than in the practical applicability of these concepts and arguments. Consequently, while most questions are about what *knowledge ought to be*, less attention has been paid to knowledge in terms of what Dewey calls “action-doing”. Put differently, and following the distinctions made by some philosophers between “philosophy” and “meta-philosophy” (Alston, 1989, pp. 1-2; Overgaard, Gilbert, & Burwood, 2013, p. 6; Ryle, 2009, p. 331) one can reformulate Dewey’s contention to read that traditional epistemology has “degenerated” from preoccupation with “substantive epistemology” to “meta-epistemology”. By “meta-philosophy”, these philosophers meant the preoccupations of philosophers with questions about the nature and meaning of philosophical notions, raising questions about the nature of philosophical methods, which are believed to be different from discussing the applications of those notions and methods. Dewey shares Gilbert Ryle’s view that preoccupation with questions about epistemological concepts and methods tends to distract us from doing epistemology itself (Ryle, 2009, p. 331).

Given the fact that many Greek philosophers mixed their metaphysical and epistemological inquiries together (which I have pointed out as a counter-objection to Dewey’s claim that traditional epistemologists ignored metaphysics), I turn now and discuss Dewey’s critique of Greek metaphysics as transcendental. I explore what Dewey meant by “transcendentalism” in terms of non-natural ontological claims- claims that are incompatible with an empirical and material world. I discuss his argument that such metaphysics is irredeemably anti-science. The most important question that I explore is: In what ways, according to Dewey, have these supposedly transcendental metaphysical theories created the problems of epistemology?

3.2.2 Dewey's critique of traditional epistemology built on transcendental metaphysics

In *Experience and Nature*, Dewey acknowledges the foundations of European or Western philosophy in the works of Greek thinkers. However, he argues that “in Greek philosophy the problems of western philosophy are either formulated or adumbrated” (J. Dewey, 1986, p. 19). Consequently he contends that this “classical theory of existence” necessarily “must be reversed” (1925, p. 81) if the “problems of epistemology” are to be surmounted. I start by discussing his critique of Greek metaphysics as a metaphysics “with a practical bias toward the regular and repeated” (1925, p. 96), a “confused metaphysics” (1925, p. 88), that bequeathed a confused “intellectual tradition” to philosophy (1925, p. 75). I then discuss the impacts of these problems on epistemology.

3.2.2.1 Greek metaphysics and the influence of the concept of “eternal”

Dewey pointed out that the foundational doctrines of Greek metaphysics are not arbitrary or products of idle speculations but are shaped by their culture and practices. He writes:

Greek philosophy, as well as Greek art, is a memorial of the joy in what is finished, when it is found amid a world of unrest, struggle, and uncertainty in what, since it is ended, does not commit us to the uncertain hazards of what is still going on. Without such experiences as those of Greek art it is hardly conceivable that the craving for the passage of change into rest, of the contingent, mixed and wandering into the composed and total, would have found a model after which to design a universe like the cosmos of Platonic and Aristotelian tradition. Form was the first and last word of philosophy because it had been that of art; form is the change arrested in a prerogative object. It conveys a sense of the imperishable and timeless, although the material in which it is exemplified is subject to decay and contingency... Such was the conversion of Greek esthetic contemplation effected by Greek reflection (J. Dewey, 1925, p. 77).

Dewey's contention is that Greek cosmology and cosmogony was adapted from what they observed in their artistic experience. From artistic experience, the idea of persistent or enduring form, the nature, stages and types of causation, and forces found in the classical works of philosophers such as Aristotle, were formulated (1925, p. 78). Following this model, it was believed that only things

that are immutable can be real or have real existence.⁵⁶ It was also believed that “changing things were not capable of being known on the basis of relationship to one another, but on the basis of their relationship to objects beyond change, because marking the limit, and immediately precious” (1925, p. 80).

In the midst of this tradition that Dewey describes as having “hypnotic influence exercised by the conception of the eternal” (1925, p. 26), he acknowledges the philosophies and metaphysics of “change” in the works of Heracleitus, Hegel, Spencer, and Bergson- a few philosophers who kept alive a sense of what classic and orthodox philosophies have whisked out of sight. However, he argues that their works also indicate “the intensity of the craving for the sure and the fixed”, by deifying change in the sense of “making it universal, regular, and sure” (J. Dewey, 1925, p. 45).

With Hegel becoming is a rational process which defines logic... and an absolute, although new and strange God. With Spencer, evolution is but the transitional process of attaining a fixed and universal equilibrium of harmonious judgement. With Bergson, change is the creative operation of God, or is God (J. Dewey, 1925, p. 45).

Dewey recalls how some philosophers turned to mathematics for models of real existence. He cites how Plato and the Pythagoreans imported mathematical concepts and Descartes and Spinoza took over the presumptions of geometrical reasoning (1925, p. 32). While Dewey does not oppose the adoption of concepts and paradigms from mathematics, logic, or science, he argues that the practice of borrowing from other fields “to cast discredit on philosophy” is problematic (1925, p. 35).⁵⁷ Again, while Dewey will not object to metaphysics that is modelled on empirical facts or after what transpires in the natural world, he was against how the Greeks translated facts about everyday life into abstract principles about existence. By “abstract” he meant “designating something which exclusively

⁵⁶ Dewey also argues that from the model, reality and superior value are equated. True, Good, and Unity became the marks of Being (J. Dewey, 1925, p. 25).

⁵⁷ One of Dewey’s worries is that philosophers have tried to define the nature of experience strictly from the laws of logic. For instance, from the logical rule that “a part cannot be larger than the whole”, Dewey notes the objection raised by his critics against his claim that experience and nature are co-extensive, that, “it is absurd that what is only a tiny part of nature should be competent to incorporate vast reaches of nature within itself” (J. Dewey, 1925, p. 4).

occupies a realm of its own without contact with the things of ordinary experience” (J. Dewey, 1925, p. 9). Plato’s non-physical, incorrigible, and infinite Forms are good examples.

Dewey contends that instead of the Greek metaphysics reflecting that nature is a mixture of elements that are both precarious and stable to foster “a conception of experimental inquiry and of reflection efficacious in action” (1925, p. 79), they opted for *the hypostatization* of what was observed. This is what he calls translating a “logic of reflection” into a cosmology or converting “mode of practice into intellectual formula” (1925, pp. 72, 79). Dewey describes this as selective emphasis. While he argues that selective emphasis can be used procedurally in kick-starting an inquiry or in formulating a hypothesis for experimentation, he argues that “deception comes when the presence and operation of choice is concealed, disguised, denied” (1925, p. 29) and when objects of selective preference are erected as “exclusive realities” (1925, p. 25). It is in this sense that Dewey referred to Greek metaphysics as a “confused metaphysics” because its proponents “formulated a doctrine in which the esthetic and the rational are confused on principle” (1925, p. 75). I now discuss some of the confusions in Greek metaphysics that Dewey identified.

3.2.2.2 Dewey’s critique of Greek Metaphysics as a confusion between cultural idiosyncrasies and philosophical truths

Dewey condemns the selective emphasis (and “hypostatization”) in Greek metaphysics as a “vice” and “intellectual arbitrariness” (1925, p. 21) because it was a consequence of a concealed form of elitism or class chauvinism. Consequently, I discuss Dewey’s exploration of the “standard view” of the Greeks for their “selective emphasis” and what Dewey identifies as the real cause.

In *The Quest for Certainty*, Dewey presents the “standard” explanation classically offered by Greek philosophers for the celebration of what is “finished”, absolute or certain in their culture and the eventual emergence of their transcendental conception of reality. He writes:

The distinctive characteristic of practical activity, one which is so inherent that it cannot be eliminated, is the uncertainty which attends it. Of it we are compelled to say: Act, but act at your peril. Judgement and belief regarding actions to be performed can never attain more than a precarious probability... Practical activity deals with individualized and unique situations which are never exactly duplicable and about which, accordingly, no complete assurance is possible... The intellect, however, according to the traditional doctrine, may grasp universal Being, and Being which is universal is fixed and immutable.... Hence men have longed to find a realm in which there is activity which is not overt and which has no external consequence (J. Dewey, 1930, pp. 10-11).

Dewey's explanation is that Greek thinkers (such as Plato and Aristotle) have defended their metaphysical position by pointing out how the existence of the perpetually changing, imperfect, physical and heterogeneous world necessitates the understanding that there are Forms that are non-physical, fixed, perfect, and eternal and non-empirically apprehended. Dewey cites how Aristotelian "four-fold causation" and "natural end" are typically used in projecting a purposeful or designed nature- a typical explanation for how "all change, or matter, is potentially for finished object" (1925, p. 78). Identifying two prominent features of Greek metaphysics, Dewey writes:

First, elimination from the status of natural ends of all objects that are evil and troublesome; secondly, the grading of objects selected to constitute natural ends into a fixed, unchangeable hierarchical order. Objects that possess and import qualities of struggle, suffering and defeat are regarded as not ends, but frustrations of ends, as accidental and inexplicable deviations (J. Dewey, 1925, p. 88).

However, Dewey argues that the Greek metaphysics is a confusion of two senses of "ends": in terms of the purpose of final destination of a self-regulating nature, and "ends" in terms of "ends-in-view, aims, things viewed after deliberation as worthy of attainment and as evocative of effort" (1925, p. 88). Dewey endorses the latter and recalls how the scientific revolution of the 17th century rejected "the imputation to natural events of cosmic appetite towards ends, the notion that their changes were to be understood as efforts to reach a natural state of rest and perfection" and regarded it "as the chief source of sterility and fantasy in science..."(1925, p. 80).

However, apart from the argument that Greek metaphysicians confused two senses of “ends”, Dewey argues that class chauvinism misled them. He writes:

Their thinkers were as much dominated about the esthetic characters of experienced objects as modern thinkers are by their scientific and economic (or relational) traits. Consequently, they had no difficulty in recognizing the importance of qualities and of things inherently closed or final.... Unfortunately, however, these thinkers were not content to speak of artists, of whom they had a low opinion. Since they were thinkers, aiming at truth or knowledge, they put art on a lower plane than science; and the only enjoyment they found worth serious attention was the object of thought (J. Dewey, 1925, p. 74).

Dewey argues that a sharp separation of servile workers and free men of leisure marked the Greek community. The social dishonour in which the working class was held was extended to the work they do (J. Dewey, 1930, pp. 8-9). For Dewey, work or practical activity is regarded as what is done “under compulsion and the pressure of necessity”, while “intellectual activity is associated with leisure” (1930, p. 8) and the blissful contemplative mind is ranked highest because of its “possession in thought of all forms of nature” (1925, p. 89). Dewey contends that there is no basis for this “artificial” or accidental class division and the “division between acquaintance with matters of facts and contemplative application” (1925, p. 79). Dewey concludes that, “in casting aspersion upon the things of ordinary experience, the things of action and affection and social intercourse”, the Greek metaphysicians “have done something worse than fail to give these affairs the intelligent direction they so much need” (1925, p. 35). I will now discuss other problems that Dewey identifies as consequences of Greek metaphysics for epistemology.

3.2.3 The negative impacts of Greek metaphysics on traditional epistemology:

Dewey contends that the metaphysics of the Greeks “found its way into all themes and subjects, and determines the form of current problems and conclusions regarding mind and knowledge” (1930, p. 12). On several occasions, Dewey compares the similarities between the metaphysical foundation of Greek epistemology and the foundation of the epistemology presented by philosophers such as Kant, Hume, and Russell, a foundation playing similar roles in the

philosophy of the 20th century. For instance, Dewey contends that Kant followed Aristotle's pluralistic and hierarchically ordered forms of existence. Specifically, he notes that, just as Aristotle identified reality with what is fixed and regular and what is unreal with what is changing and hazardous, Kant also "assigns all that is manifold and chaotic to one realm, that of sense, and all that is uniform and regular to that of reason"(J. Dewey, 1925, pp. 44-45).⁵⁸ Dewey also shows how "Platonic division into ideal archetypes and physical events" and "Aristotelian division into form which is actuality and matter which is potential" influenced Kant's distinction between the noumena (things-in-themselves) and phenomena (objects as they appear to observers). He contends that these distinctions define contemporary positions of the absolutist idealists on reality and appearance (J. Dewey, 1925, p. 50). Some epistemological problems common to these philosophies, according to Dewey, include the dialectic problem of showing how the senses relate to thought, relating a thing as observed and a thing in its unobservable form and relating the noumenal world to the phenomenal world.

Dewey identifies the influence of Greek metaphysics on Cartesian rationalist metaphysics and epistemology in which the human thought (mind), described as distinctively immaterial, incorrigible, and indubitable, and was contrasted with human body. Dewey contends that the consequence of this metaphysical view is "a transcendental supra-empirical self" (1925, pp. 184, 188,). Consequently, Cartesian epistemology was confronted with the epistemological problem of how to explain the relation between human mind and body (J. Dewey, 1925, p. 206).

We can summarise the consequences of building an epistemology on a transcendental metaphysics as follows. Firstly, Dewey contends that "the arbitrary character of the "reality" that emerges is seen in the fact that different objects are selected by different philosophers (1925, p. 25). Consequently, there are confusions because there are many objects of knowledge. In addition, from the (metaphysical) premise that only things that are stable are real, several

⁵⁸ Dewey also identifies a similar craving for what is fixed and regular in Hegel's conceptions of logic and God. He also identifies this factor in Spencer's theory of evolution (J. Dewey, 1925, p. 45).

corresponding epistemological themes emerged, which include the ideas that knowledge involves certainty⁵⁹ and that only things that exhibit the attribute of certainty are knowable. From the conception that metaphysics is about the quest to know the Absolute or Universal Being, the conception of the attributes of knowledge became associated with immaterial and spiritual principles⁶⁰ and the subject-matters of metaphysics and epistemology are regarded as different from science (J. Dewey, 1925, pp. 126, 188).

Secondly, Dewey contends that knowledge and action are conceptually separated based on the argument that practical activities and theories are different phenomena and unconnected (1930, p. 9). “Knowledge” became elevated above *making and doing* (1930, p. 10). In addition, the idea of “objective knowledge” or knowledge without any human input and pragmatic consideration, often described as “pure knowing”, became celebrated (1930, p. 12). One of the fall-outs of the downgrading “practical activity” and severing it from knowledge is the endorsement of “thought” (and meditation) as the pathway of knowing the universal Being or knowledge.⁶¹ According to Dewey, “thought has been alleged to be a purely inner activity, intrinsic to mind alone” and consequently is “complete and self-sufficient in itself” (1930, p. 11).

More generally, the influence of Greek metaphysics can be seen on the conceptions of the nature, scope, and subject-matter of epistemology. For instance, with the conceptions of reality in Greek metaphysics characteristically unempirical (such as Plato’s Forms), the phenomena that traditional epistemologists are called upon to investigate are believed to be different from those studied in the sciences. Consequently, the relevance or usefulness of the methods and resources in the sciences to philosophical inquiry becomes

⁵⁹ Dewey succinctly described the preoccupation of the epistemologists from the Greek time to the contemporary period as the quest for certainty (J. Dewey, 1930). Philosophers became obsessed with the quest to establish self-evident data that possess properties that put it beyond doubt (J. Dewey, 1925, p. 72).

⁶⁰ For instance, Plato argued that knowledge of “particular things” gained from the senses cannot be objective and absolute.

⁶¹ The argument is that human organs intractably are involved in overt actions. And like every other instrument of practical activity, there is no predictable certainty (J. Dewey, 1930, pp. 8-9).

debatable. Such supposedly non-scientific phenomena include essences in nature, the human mind and its capacity to represent or “mirror” nature, and epistemic norms that are believed not to be part of nature. Consequently, philosophical inquiries are regarded as requiring methodologies that are quite different from science. The challenge to and attempted refutation of these notions constitute the bulk of Dewey’s naturalistic epistemology.

I now discuss Dewey’s conception of epistemological inquiry and how its empirical and practical features warrant the method of investigation which he calls “the denotative empirical methodology” (DEM).

3.3 Dewey’s conception of inquiry and denotative empirical methodology (DEM)

A common view in all traditions or schools in philosophy is that the discovery and demonstration of the truth of a claim depends largely on their methodological approach. Consequently, empiricists, rationalists, intuitionists, reliabilists and other schools of epistemology, have been identified by the methodologies they subscribed to in addressing philosophical problems. In this regard, the concern about the link between truth and methods or the reliability of methods is an on-going concern among epistemologists. In most of his works, Dewey shared this view about the importance of method. He notes that a good method is a necessary precondition for having any genuine understanding (1929, p. 203). Consequently, the methods of doing philosophy came under his severe criticisms. At numerous points, he attributed the cause of the lingering problems in philosophy to the use of these methods which he described as non-empirical.

In this section, I discuss Dewey’s critique of traditional methods for being “non-empirical. I argue this critique is one of the consequences of his contention that epistemology is a practical and experimental inquiry. More importantly, I explore his argument that non-empirical methods fail to “enlarge” the objects of study. I then discuss his arguments for recommending the denotative empirical method for epistemological inquiry. I focus on questions such as: In what ways is this new

method experimental? How does its use enlarge the object of study in epistemology? How distinct is this method from the methods of science?

3.3.1 Dewey's critique of the use of non-empirical methods in traditional epistemology

In *Experience and Nature*, Dewey identifies several methods that philosophers use in their investigations: the use of definitions, dialectical argumentation, contemplation, logical analysis, and intuitive reasoning, which he usually (derogatively) referred to as "reflective analysis" (1925, pp. 11, 13, 17, 18, 19, 21). In another work, he criticised the peculiar "methodological doubt" of Descartes as "pathological" (1991, p. 109). What all these methods have in common, according to Dewey is the absence of the use of empirical data, empirical observation, empirical verification, and practical experimentation. Dewey's description of non-practical and non-empirical philosophical theorizations as "intellectualism" matches what contemporary philosophers such as Kirk (2014), Kornblith (2014a), Papineau (2014) and Prinz (2008) describe as "arm-chair philosophy".

However, I argue that Dewey did not out-right condemn these unempirical methods as useless in theorizations. His concern is that the total dependence on the use of these traditional methods without empirical observation and validation will invariably lead to a series of erroneous traditions and paradigms. Dewey cites how the use of analysis led to the conception of experience that is antithetical to nature, which according to him implies that human beings are not part of nature (1925, p. 21). He also cites how absolute reliance on dialectical definition reduces the chair we sit on, stumble against and carry about, to "certain qualities of sense attending the act of vision" (1925, pp. 17-18). He describes such philosophy as consequences of "arbitrary intellectualism" (1925, p. 21) and "scholasticism" (1925, p. 25).

However, Dewey identifies "the root-cause" of the problematic nature of non-empirical methods- inquiry that do not start from the natural setting or background of the phenomena under investigation. He writes:

Non-empirical method starts with a reflective product as if it were primary, as if it were the originally “given”. To non-empirical method, therefore, object and subject, mind and matter (or whatever words and ideas are used) are separate and independent (J. Dewey, 1925, pp. 11-12).

Dewey illustrates his point through how concepts such as experience, essences and sense-data are discussed by traditional epistemologists in such a way that they are disconnected from their natural basis in human transaction within nature. For instance, in their discussion of essences, Dewey argues that qualities of natural phenomena (hot/cold, wet/dry, up/down, light/heavy) are regarded as “essential forms and active principles of nature”. While he does not object to studying phenomena through their qualities, Dewey disagrees with Galileo, Descartes and Hobbes for arguing that “these sensory forms are things to know” (J. Dewey, 1925, p. 111). His argument is that designating some aspects of a phenomenon as “qualities” is theoretical or what he calls “our secondary experience” and must be used in studying the original natural phenomenon which those qualities belong to. Consequently, Dewey writes:

The charge that is brought against the non-empirical method of philosophizing is not that it depends on theorizing, but that it fails to use refined, secondary products as a path pointing and leading back to something in primary experience. The resulting failure is threefold. First, there is no verification, no effort even to test and check. What is worse, secondly, is that the things of ordinary experience do not get enlargement, and enrichment of meaning as they do when approached through the medium of scientific principles and reasonings. This lack of function reacts, in the third place, back upon the philosophic subject-matter in itself. Not tested by being employed to see what it leads to in ordinary experience and what new meanings it contributes, this subject-matter becomes arbitrary, aloof-what is called “abstract” But the problems to which non-empirical method gives rise in philosophy are blocks to inquiry, blind alleys; they are puzzles rather than problems, solved only by calling the original material of primary experience, “phenomenal,” mere appearance, mere impressions, or by some other disparaging name (J. Dewey, 1925, pp. 8-9).

Thus, what non-empirical methods lack, generally and most fundamentally is a background metaphysics, which Dewey describes as human transaction within nature. From this view, Dewey makes a strong point that “knowledge is not the only mode of experience that grasp things”(1925, p. 73). Dewey also makes another strong point that non-empirical methods take us away from objects of primary experience which are concrete reality, which are denied as unreal or

phenomenal. He argues that this method leads to the subject-matter of experience becoming arbitrarily abstract and renders the material world irrelevant in the verification of claims about it. As an example, Dewey cites the classical distinction between “sense data” of a table and the “sensation” of the same table in Russell’s *Appearance and Reality* and various works of the phenomenologists. Comparing the “experience” of a table before philosophical analysis and after philosophical analysis, many philosophers such as Russell and the phenomenologists have concluded that “the real table, if there is one, is not immediately known to us”. Consequently, it has been assumed that “sense data” of the table and the “sensation” of the same table are two distinct and separate things (B. Russell, 1992, pp. 183-189). Consequently, there are duplications of entities such as body and mind, objective and subjective, and real and appearance- without any explanation of how the dualized entities relate to one another. Dewey’s submission is that the consequences of the use of non-empirical methods are numerous recurring pseudo-problems in epistemology. I now discuss Dewey’s arguments on how these problems are rectified or prevented through the adoption of denotative empirical method.

3.3.2 The nature and significance of denotative empirical method (DEM) in Dewey’s naturalistic epistemology

In *Experience and Nature*, Dewey introduces the “denotative method” as an “empirical method”. However, his description of this method has been challenged as vague by critics. As noted by several scholars such as Alexander, Dewey describes the denotative-empirical method (DEM) largely in negative terms, warning philosophers about the kinds of philosophical investigations and practices that the method rigidly prohibits (T. M. Alexander, 2004, p. 253). Alexander and Gale did not hide their disappointment that what it means for a method “to denote”, remains obscure, when considered from the list of what the method forbids and the advantages Dewey argues it has over rival methods (T. M. Alexander, 2004, p. 248; Gale, 2010a), .

I argue that we do not need to view the negative terms in which Dewey's denotative method appears as problematic because regulative norms are usually about either what we ought to do or what we are prohibited from doing. I think a better way of critiquing this method is to challenge those advantages that Dewey claims the method has over non-empirical methods such as analysis. For instance, he argues that the adoption of DEM provides an account of how human experience is part of nature and that putting experience in its natural setting will facilitate the understanding of how metaphysics plays a foundational role in epistemological inquiry. He also argues that DEM engenders experimentation and prediction in epistemology. I examine these claims because doing so offers more information about the nature of the denotative empirical method. I start with Dewey's claim that the application of DEM engenders the understanding of the inclusive nature of experienced phenomena.

Dewey contends that only the denotative method can guarantee a naturalistic account of experienced phenomena because only it directs inquiry towards objects of knowing rather than the knowing mind. For instance, he argues that in the use of reflective analysis, human experience and nature are severed. However, adopting denotative empirical method enables the understanding that "experience" indicates a symbiotic relation between nature and human beings (J. Dewey, 1925, p. 11). How does this happen? The method engenders inquiries that "start with no presuppositions save that what is experienced" (J. Dewey, 1925, p. 20). Consequently, "all the phenomena of magic, myths, politics, painting and penitentiaries" have the right to be studied in the way they are experienced rather than being rejected as un-scientific, illusions or sophistries because of the assumptions that their subject matters cannot be strictly explained through the laws of physics.

Take for instance Dewey's account of how denotative inquiry and understanding can unravel the "real" or most enduring value or reason "that kept men loyal" to magic, tribal myths and observation of religious rites. He writes:

But it possible to magnify the place of magical exercise and superstitious legend. The primary interest lies in staging the show and enjoying the spectacle, in giving play to the ineradicable interests in stories which illustrate the contingencies of existence combined with happier endings for emergencies than surrounding conditions often permit. It was not conscience that kept men loyal to cults and rites, and faithful to tribal myths. So far as it was not the routine, it was enjoyment of the drama of life without the latter's liabilities that kept piety from decay. Interest in rites as means of influencing the course of things, and the cognitive or explanation office of myths were hardly more than an embroidery, repeating in pleasant form the pattern which inexpugnable necessities imposed upon practice (J. Dewey, 1925, p. 68).

Here, we have two conceptions of superstition (whether in the form of myth, magic, or religion). The first is that these phenomena are means of explaining and controlling the physical world. This view alienates these phenomena from the subject-matters of science because they are regarded as unscientific. However, Dewey proposes an "unconventional" conception, that these phenomena have esthetic value for which they are latently appreciated. We have discussed how Dewey defines phenomena or experience that are not "means to other ends" as "esthetic" in Chapter Two. I will not repeat the discussion here. However, I argue that conceptualising myths, magic, and religion in this naturalist way makes them amenable to scientific investigations. We may inquire if tribal myths (for instance) have sociological values. My primary point is that Dewey argues that only in the adoption of denotative method can the cognitive importance of these phenomena be unravelled.

The use of DEM compels inquirers to trace the genesis of the phenomenon under discussion in terms of the history of how it becomes a subject of inquiry. Thus, for Dewey, it the only method that can show how the problems encountered in primary experience lead to secondary experience in which systemic and scientific theorizations take place. It is also the only method that can show how the results of these theorizations are referred back to the primary experience for validation (in which problems encountered in primary experience are solved). Dewey's contention is that while the empirical method shows, naturalistically, that primary and secondary experiences are a kind of continuum, non-empirical methods such as reflective analysis, on the other hand, "tear the object of experience into two" by upholding the objects of secondary experience as the only "reality" while the

object of primary experience, which actuate the former are regarded as mere “appearance” or “phenomenal.”

Dewey argues that DEM shares characteristics which scientific methods such as empirical testing, the use of hypotheses, repeated experimentations and provisions for prediction. He argues that these characteristics make DEM more relevant and appropriate in inquiry about human knowledge than non-empirical methods. I turn now to examine these claims.

3.3.3 DEM and its affiliation with scientific methods

The impression created in *Experience and Nature* by Dewey is that the denotative empirical method is modelled after scientific methods (1925, pp. 1-36). However, it is arguable that Dewey is not specific about the scientific methods he had in mind. We need to know Dewey’s choice of scientific method(s) for comparing these methods with Dewey’s denotative method- to see the affinity between them. Consequently, I will start by discussing the affinity between Dewey’s denotative method and some scientific methods.

Among the methodological approaches cherished by Dewey, the use of empirical and practical experimentation is the most preferred, most especially in terms of how material hypotheses are made use of in the way that natural phenomena are explained and predictions are made possible. His references to the preoccupation of geologists, Darwin and Einstein makes this evident. According to him, a scientist observes natural phenomena, collates and dates his objects of study in sequential manner. She compares various data, explains events in the past and makes predictions into the future (J. Dewey, 1925, pp. 3, 7). I argue that these are the most prominent among the features of scientific methodologies that Dewey incorporates into his denotative empirical method. How are these features incorporated in DEM? What are their advantages for epistemological inquiry? I start by exploring the practical feature of inquiries conducted through DEM and then discuss how it involves the use of hypotheses and engenders experimentations and predictions.

3.3.3.1 The practical and empirical nature of DEM

One of the prominent features of scientific methods that Dewey identifies in DEM is practical inquiry. He writes:

... Empirical method points out when and where and how things of a designated description have been arrived at. It places before others a map of the road that has been travelled; they may accordingly, if they will, re-travel the road to inspect the landscape for themselves ... (J. Dewey, 1925, p. 28).

Dewey's point is that the use of DEM does not encourage relying on definitions, conceptual analysis or dialectics alone. This means that inquiry can neither begin nor end with reflections. The method investigates human physical transaction within nature (Boydston, 1981, pp. 375-376) and "elaborates and conveys directions that intelligently point out a course to be followed J. Dewey (1925, p. 29). It is in this sense that the method is inextricably tied with his naturalistic and empirical theory of reality and knowledge by emphasising that inquiries are ultimately for practical purposes.

Dewey contends that the adoption of the denotative method will guarantee repeatable empirical experimentations in philosophy (1925, p. 28). For him, experimentation becomes inevitable in epistemological inquiry because, with naturalist inclination, it is now concerned with "various modes in which action is manifested: industry, politics, the fine arts, and upon morals conceived as overt activity having consequences, instead of as mere inner personal attitude" (J. Dewey, 1930, p. 9). Purposeful manipulation of the physical world in such a way that it enhances human transaction within it becomes experimental because it has become "a mode of directed practical doing" (J. Dewey, 1930, p. 9). I elaborate the discussion of this experimentation in Dewey's epistemology in section 3.5 of this chapter.

One feature of DEM that also facilitates experimentation is the use of hypothesis. For Dewey, inquiry about knowledge is inquiry about a natural event that is "unfinished, incomplete and indeterminate" and consequently "possesses a possibility of being managed and steered that ends may become fulfilments".

Thus, he argues, “suspense, doubt, hypothesis, experiments with alternatives are exponents of this phase of nature” (J. Dewey, 1925, p. 32). Dewey’s point is that the regulating the on-going and incomplete processes involves selecting consequences that are preferred. Again, I shed more light on this view in sections 3.4 and 3.5.

Dewey contends that through the use of denotative method, the proper function of knowledge can be understood. In solving any transactional human problem, two major guidelines are mandated when denotative method is adopted. First, in the words of Alexander, “putting knowing in a context” (2004, p. 248) and ensuring “that things must be studied on their own account” (2004, p. 250). By this suggestion, Alexander is referring to Dewey’s claim that each problematic situation has its history: when, how and why it happened and the roles the problem plays in the wider scope of human histories (J. Dewey, 1925, pp. 67-101). By “putting knowledge in the context”, the use of denotative method ensures that what brings about the concern for the subject-matter of knowledge is identified and the most intelligent possible ways of resolving it outlined for experimental considerations. This simply means that the quest for knowledge cannot take place without a concern or a problematic situation. Dewey was interested in deeply human practical problems “that cover every aspect of contemporary life: domestic, industrial, political” rather than the intellectual “problem of knowledge” that philosophers have prioritized (J. Dewey, 1968, p. 7). Furthermore, subsequent reflections concerning the problem such as our choice of data used in reflection, must all be acknowledged. Consequently, noting the context of the problem that brings about a quest for knowledge and the consequences that are preferred, enables the nature and functions of knowledge to be understood.

3.3.4 Some criticisms of DEM

Apart from the criticism raised by Alexander and Gale that Dewey’s description of his DEM is vague, which I take to be general, there are other specific critiques that I regard as specific and more serious. I will discuss two in this section. The first is that if Dewey’s DEM is a scientific method, its adoption will be an unnecessary

multiplication of scientific methods. The second is that there is a confusion in Dewey's philosophy because there is no distinction between the method he is recommending and the content of his metaphysics and epistemology.

3.3.4.1 DEM and the challenge of unnecessary multiplication of methods

One way of critiquing Dewey's recommendation of DEM is to ask: if Dewey has faith in the reliability of scientific methods, why do we need denotative empirical method? I answer this question by exploring how Dewey differentiates DEM from scientific methods without betraying his faithfulness to the latter. I start by discussing what Dewey meant by "denotation".

What does "denotation" signify in Dewey's methodology? For Dewey, some phenomena have ineffable presence. By this, he meant that it is very difficult to provide direct definitions or adequate descriptions for them even though we can understand what the names given to them refer to when they are mentioned. For instance, according to him, we cannot define "life" directly, but from the use of the word we know what it denotes or points to: "a function, a comprehensive activity, in which organism and environment are included" (1925, p. 11). According to Dewey, "immediate things" are like the word "life", they may be "pointed to by words, but cannot be described or defined. When an attempt to describe occurs, it involves "a circuitous method of pointing or denoting" (J. Dewey, 1925, p. 73). For Dewey, although these phenomena are undefinable, they are capable of denotation because they have communicable meaning (1925, p. 144). This suggests that there is inadequacy in the use of our linguistic machinery because not all that exists can be formulated in language. This is also an evidence against the idea that 'the real' = 'the rational'. Consequently, when a phenomenon denotes, it means it has a history which can be "deconstructed" to reveal how it occurs and its significance in relation to other occurrences. Consequently, to overcome the ineffable presence of these phenomena and make them fit properly into our schemes of explanations about the world, Dewey suggests the reconstruction of how we understood them. It is in this sense that he sees an empirical philosopher who adopts a denotative method as an "agency of novel

reconstruction of a pre-existing order (1925, p. 178) and who carries out “experimental reshaping of external conditions”(1925, p. 60).

One popular interpretation given to express the denotative nature of Dewey’s method is that it is a method pointing to the “generic” or “genealogical” foundation of any phenomenon under study. For Gale, it is a method “ in which “an idea or doctrine is understood in terms of its genesis (Gale, 2010a, p. 62). By “understanding the genesis of an idea”, he meant the emergence of an idea and the considerations given to it in a problematic situation. For Hickman, the denotative method is an art of giving “experimental attention to the pushes and pulls of existential affairs” (2007, p. 21). This interpretation is corroborated in many passages in Dewey’s *Experience and Nature*. For instance, in chapter one of the book, Dewey writes,

Given this element of knowledge in primary experience, it is not difficult to understand how it may develop from a subdued and subsidiary factor into a dominant character. Doing and Suffering, experimenting and putting ourselves in the way of having our sense and nervous system acted upon in ways that yield material for reflection, may reverse the original situation in which knowing and thinking were subservient to action-undergoing. And when we trace the genesis of knowledge along this line, we also see that knowledge has a function and office in bettering and enriching the subject-matter of crude experience (J. Dewey, 1925, p. 22).

Again, in his earlier work, Dewey discusses the methodology guiding psychological investigation and most probably one of the methodological paradigms from which he adapts his denotative methodology. He writes:

The object of the science of psychology is to take the concrete manifestations of mind, to analyse them and to explain them by connecting them with each other (J. Dewey, EW 2: 26).

In *Experience and Nature*, Dewey rejects features assigned to human mind such as non-spatiality and non-materiality in traditional epistemology and metaphysics typified by the Cartesian philosophy. Rather than seeing “mental activities” in terms of a “mode of regulation that operates wholly from within”, Dewey considers mental activities (such as thinking, cognition, and consciousness) as reactions to natural events (1925, pp. 63-64, 141). He identifies “mind” and

“matter” as “different characters of natural events” (1925, pp. 63-64). For him, mental activities are preceded by series of events (as background) and sequential events (as foreground) and both can be investigated and connected with one another.

Thus, to know the genesis of a phenomenon, three stages are involved. First, there is a need to identify its empirical properties or manifestations. Second, we need to empirically analyse these manifestations by tracing different phases these manifestations have passed through. Finally, there is the synthesis stage in which the analysed parts must be assembled together again, with the connections between the parts noted and reflected upon.

Given the above enumerated features of Dewey’s denotative method, it becomes easy to see the similarity it shares with Locke’s “historical plain method” in the sense that Locke admonished us that for each significant aspect of human knowledge we should ask questions such as: Where does it come from? How reliable it is, and how broadly does it extend? (Locke, 1952, Essay 1; i (1-2).). However, the denotative method goes deeper as it involves other themes in Dewey’s naturalistic metaphysics such as seeing methodology as a means for experimental reshaping of pre-existing order. These features also distinguish Dewey’s denotative method from other methods such as Max Weber’s empathic understanding and Hempel’s deductive nomological model.⁶²

⁶² For instance, the cause-effect analysis that features prominently in Hempel’s hypo-deductive model is conspicuously absent in Dewey’s denotative method, although the paradigms of the methodologies in science are believed to be important in the features of this denotative method. Also, Dewey recognises the importance and indispensability of the use of imagination in human interaction (J. Dewey, 1934, p. 272). Consequently, it becomes one of the features of his denotative empirical method. Max Weber also emphasised the indispensability of the use of imagination in his proposed method of emphatic understanding in social sciences (interpretative verstehen) (Weber, 1949). For Weber, to understand an historical actor’s (who is being studied) point of view, we need to imaginatively put oneself in his position to “see” how and why he acted the way he did. However, while “imagination” is explicitly an experimental tool for “thought experiment” in Max Weber’s “emphatic understanding”, Dewey’s emphasis on empirical experimentation seems to make the use of imagination a heuristic method.

3.3.4.2 The challenge that there is no distinction between theory and methodology in Dewey's metaphysics and epistemology

Another criticism is that Dewey failed to make a distinction between the method and content of his metaphysics and epistemology. Critics have challenged this overlap as a form of weakness. For instance, Robert Dewey, who argues that Dewey's view concerning the nature of experience is involved in his conception of the empirical method itself (R. E. Dewey, 1977, pp. 31-39) and that his instrumentalist view of humanity is closely linked with his denotative methodology (R. E. Dewey, 1977, pp. 43-50), warns that,

When Dewey recommends the empirical method for our guidance, he is recommending at the same time a definite view of not only a man's experience but also a conception of man as a problem –solving animal, whose thinking is instrumental, whose nature is socially-produced, and whose values are open to empirical validation. If any of these beliefs about man are surrendered, Dewey would either have to modify his conception of the empirical method, or else abandon his recommendation of it as the only reliable method (R. E. Dewey, 1977, pp. 50-51).

Robert Dewey's contention is that the denotative method should be distinct and distinguishable from the objects of study for purposes of clarity. This concern was also expressed by Shook when he argued that "Dewey's philosophical methodology is purely theoretical and must not be converted to a metaphysical thesis" (Shook, 2000, p. 89).

However, the question is: Why is the overlap regarded as a problem and not a pointer to a kind of consistency in the overall framework of Dewey's naturalism? Shook, for instance, noted that the coherence between Dewey's themes such as his theory of meaning, truth, conception of object of knowledge (to which we can add his methodology), establishes Dewey's empirical philosophy as a genuine and significant alternative to positivism, dualism and materialism (2000, p. 217). For Tuggle, the fact that there is no sharp distinction between Dewey's instrumentalism and Experimentalism neither affects his notion of truth nor serves as a pointer to any form of inadequacy concerning his methodology (1997, p. 39).

I think the way Dewey's conceptions of reality and knowledge play significant role in the formation of his denotative empirical method enhances the uniqueness of his empirical and naturalistic philosophy. In addition, Dewey's contention makes sense- that the project of experimental reshaping of pre-existing order is the point where "the interests of empirical and denotative method and of naturalistic metaphysics wholly coincide"(J. Dewey, 1925, p. 60). Finally, he identifies one common trait between the denotative empirical method and scientific methods - both recognize the importance of the continuity between the material of the actual world "as it is concretely experienced" and the material of "refined" scientific or denotative methods (1925, p. 33). This is essential for successful manipulation or control of the physical world.

I now discuss Dewey's instrumentalist and experimentalist conceptions of knowledge, truth, and justification. I start the discussion by exploring how these conceptions are consequences of his rejection of the separation of knowledge from practical activity in traditional epistemology. This is a perspective which he calls a spectator theory of knowledge.

3.4 Dewey's instrumentalist theory of knowledge

Dewey noted that despite disagreements among traditional schools of epistemology about how knowledge is acquired, there are some common features of knowledge they agree upon, as indispensable. One of these features is that "knowledge" must be objective. An objective knowledge is widely supposed to be what "mirrors" or "represent" exactly what the world is- *without human interference*. Dewey frequently referred to the traditional theories of knowledge that are developed based on this assumption as "spectator theories". On how traditional epistemologists competed to show whose notion of knowledge is more "objective" than the others, Dewey writes,

All the rivalries and the connected problems grow from a single root. They spring from the assumption that the true and valid object of knowledge is that which has being prior to and independent of the operation knowing. They spring from the doctrine that knowledge is a grasp or beholding of reality without anything being done to

modify its antecedent state-the doctrine which is the source of the separation of knowledge from practical activity (J. Dewey, 1930, p. 188).

Again, he writes,

The theory of knowing is modelled after what was supposed to take place in the act of vision. The object refracts light to the eye and is seen; it makes a difference to the eye and to the person having an optical apparatus, but none to the thing seen. The real object is the object so fixed in its regal aloofness that it is a king to any beholding mind that may gaze upon it. A spectator theory is the inevitable outcome.... (J. Dewey, 1930, p. 26).

This is Dewey's critique of the conceptions of an "ideal knower" and "objective knowledge" in traditional epistemology. He argues that an ideal knower in the traditional setting is an investigator who studies the external world in a way that the data that form his objects of study are free from subjective interference. The investigator's sole mission is to unveil what is out there in the world, delineating between what is known, what can be known and what is unknowable. Is Dewey's description an exaggeration?

In his agreement with Dewey that "spectator theory" typically describes the assumption about knowledge in traditional epistemology, Robert Dewey writes:

Common to all these positions is the assumption that the object known is some reality as it exists prior to being known. There is also general agreement that knowing must not alter its object. If one were to admit that the object known is a product of some practical activity upon the part of the knower, one would thereby admit the presence of a distorting factor in the very process of apprehending the object (R. E. Dewey, 1977, p. 143).

This passage succinctly describes how traditional epistemologists became preoccupied with their quest for certainty and objectivity. Every epistemological thesis in this historical setting usually commences with the recognition of "reality" as an "external world" which every correct and useful theory must correspond with. An objective attainment of knowledge is only possible, according to this conception of reality, if an epistemic agent can separate his emotion, presumptions, and interests from the object of his study. Consequently, this rigid demarcation between man and Nature (which translates into the dichotomy between subject and object, respectively) reflects prominently in philosophers'

conceptions of knowledge, truth, and justification. For instance, traditional and modern epistemologists are noted for making distinctions between practical knowledge and theoretical or propositional knowledge. More importantly, they are noted for their unanimous recognition of propositional knowledge as the subject-matter of epistemology.

Another significant way that traditional epistemologists have modelled their theories on a spectator framework, according to Dewey, is found in their preoccupation with making their notions of justification reflect “objective criteria” and dispassionate investigations. For instance, epistemologists have made distinctions between epistemic and non-epistemic justification and shown their preference for the former.⁶³ Richard Fumerton gives two examples of such non-epistemic justification: prudential and deontological. For him, a patient’s quick recovery may be facilitated by her optimism that she will get well. He calls this a prudential justification. He also cites the case of a husband, who, acting strictly on the moral obligation to be loyal to his wife, believes his wife to be faithful even in the face of rather powerful epistemic reasons for believing otherwise. According to Fumerton, these are regarded as examples of non-epistemic justification because the basis of the beliefs held is non-rational. According to him, both optimism or faith (upon which the patient’s belief in her recovery rests) and the moral duty to believe the faithfulness of one’s wife at all time, do not “make probable the truth of the propositions believed” (Fumerton, 2002, p. 205). Other epistemologists have made similar distinctions between epistemic and non-epistemic justification (Alston, 1989). The point is that theories that are built on subjective or pragmatic variables or reasons are somewhat “derogatively” referred to as non-epistemic or non-rational theories of justification.

Is this concern for “objectivity” or certainty unreasonable? I think Dewey accepts it as reasonable if the concern can be prevented from leading to non-naturalistic

⁶³ The question is: Why should an epistemologist be interested in non-epistemic justification? My focus in this section will be on Dewey’s rejection of the basis upon which the distinction was made. For Dewey, the rejection of the practical nature of knowledge led traditional epistemologists to regard justification that are based on practical evaluation as non-epistemic.

conceptions of reality and human nature. For instance, Dewey contends that in the world full of dangers, the “need for assurance was the dominant emotion” (1930, p. 13). He admits that it is reasonable for a man who realizes that he lives in a world of hazards to seek means and assurances of escaping from peril. He can only be certain of security if the means of securing this safety is objectively determined (1930, pp. 7-27). Put in a more theoretical sense, the quest for an independent or privileged access to reality or a conception of an absolute reality looks indispensable, as noted by Manicas: “if we want to avoid relativism and anchor our fallibilism”. There is need for an absolute reality and some privileged access to it “if criticism and persuasion is not to collapse into sophistry” (Manicas, 2008, p. 121).

However, Dewey’s point is that the conception of objectivity in traditional epistemology is highly “theoretical” or “intellectual” and consequently far from reality. It is theoretical in the sense that the idea of objectivity is only possible within the framework of how propositions (about reality) relate to one another and not in the sense in which nature puts pressure on human beings to think and act in certain ways. As noted by Rorty, the concept of “objectivity” in traditional epistemology has been defined in terms of conditions of accurate representation of an antecedently existing reality (1979, p. 11). The concept, in this sense, has become “transcendentalized”. However, for Dewey, theories are said to be “objective” in naturalistic terms only in relation to some specific goals in human transactions and specific goal-oriented manipulations of nature.

For Dewey, the adoption of a naturalistic conception of reality shows that there is no “external world” as construed by traditional epistemologists- a world that is independent of man. Man is part of the world in which he acts as subjects and objects in the continued process of the dynamic world. With this new conception of man, there cannot be a view of the world so privileged as to exclude man. It equally follows that no point of view about the world can be regarded as a “disinterested investigation” or as a dispassionate observation” because human needs, desires and emotions are consequences of their symbiotic relation with

nature. More importantly, knowledge is an instrument for manipulating or transforming the world so that these human needs can be met. Dewey writes:

[T]he instrumental nature of object of knowledge accounts for the central positions of laws, relations. These are the formulations of the regularities upon which intellectual and other regulation of things as immediate apparitions depends (J. Dewey, 1925, p. 121).

Again, he writes:

But in the practice of science, knowledge is an affair of making sure, not of grasping antecedently given sureties. What is already known, what is accepted as truth, is of immense importance; inquiry could not proceed a step without it. But it is held subject to use, and is at the mercy of the discoveries which it makes possible. It has to be adjusted to the latter and not the latter to it. When things are defined as instruments, their value and validity reside in what proceeds from them; consequences not antecedents supply meaning and verity (J. Dewey, 1925, pp. 128-129).

Dewey's point is that the basis for the justification of any claim about the empirical world lies in the events in that world, between the event that actuated the inquiry and the outcome of the inquiry (knowledge) that solves the problem. Consequently, ultimate justification is neither in any analysis of the relationship among propositions nor in human thought. For Dewey, the practice in science exhibits the acknowledgement of the instrumental nature of knowledge: occurrence or fear of occurrence of epidemic incites scientific inquiries and the discovery of antidotes that cure or prevent this threat is knowledge. His point is that justification of beliefs lies in some reconstructive function in nature. For him, "only action, interaction can change or remake objects" (1925, p. 132).

In this sense, defining objectivism in a way that ignores these modes of transaction is unacceptable. Put differently, the argument is that the "ontological sense" in which the object and subject are defined as antithetical to one another, is rejected (J. Dewey, 1925, p. 196). More specifically, the ontological sense in which subjectivism is used to indicate a rigid contrast between individuals with the society, is rejected (J. Dewey, 1925, p. 201). In lieu of this absolute conceptions, objective or subjective is now defined by Dewey in terms of "factors in a regulated effort at modification of the environing world" (1925, p. 196).

3.4.1 Some criticisms of Dewey's instrumentalist conception of knowledge

Several scholars have agreed that Dewey's rejection of the spectator theory of knowledge is plausible, most especially in the sense that he calls attention to the practical and instrumental aspects of knowledge that traditional accounts have neglected (R. E. Dewey, 1977, p. 167; Kadlec, 2007, p. 55; Manicas, 2008). However, there are some challenges.

There are three significant objections to Dewey's instrumentalist notion of knowledge. First, by challenging his idea that the quest for knowledge is rooted in problematic human transaction as an exaggeration. For instance, one may agree that there are many problems in nature that may serve (or have served) as springs for inquiry but claim that it is an exaggeration to say that every instance of inquiry emanates from problem or is meant to solve a problem. For instance, an academic publishing papers to enlarge the scope of human knowledge may not fit the description of inquiry (or knowledge) necessarily emanating from problematic situations. Scientific discovery of laws of nature is another example where curiosity to unravel the mysteries of nature have been cited. Consequently, if there are quests for knowledge that are not actuated by a problematic situation, such knowledge will be non-instrumental. Second objection is that linking knowledge with human problems and interests, the objection continues, renders it anthropocentric. This second objection is based on the argument that while other fields (such as biology, geography, anthropology and physics) study some particular aspects of knowledge, only traditional epistemology focuses on what it means to know and is consequently regarded as studying knowledge in its general form. If Dewey's epistemology focuses on human knowledge alone, the argument continues, then it is different from traditional epistemology.

I agree that the way Dewey uses the phrase "problematic situation" to cover every human activity can be misleading. It is used in a clumsy way such that every human activity meant for progress are portrayed as characterised by obvious and imminent dangers; similar to escaping from a lion's den or running to safety

through a mine field.⁶⁴ Whereas, he uses the phrase to cover seemingly non-life threatening activities such as planning and acting in reference to some anticipated future progress that are common in human life (such as an academician who is meticulously planning and building a career by publishing and attending conferences).⁶⁵ However, there is other description that he offers that redresses the clumsiness. He describes this situation as a “disturbed relation of organism-environment” (J. Dewey, 1991, p. 42). We can explain this “disturbance” in terms of *existential situation* that generates tension or conflict of ideas or thoughts. Kosnoki Jason describes this “situation” as when individuals feel “tension between the discordant aspects of their environment” (2010, p. 98), in a way that they are rendered incapable of deciding a priori which action is capable of bringing the desired solution. Consequently, the phrase can be interpreted as covering any human activity that demands making choices, provokes thought, and encourages creation of new ideas. The key word is “transformation”; creating new situations that actuate further problems and further inquiries.

In response to the second objection, I argue that the idea of “general knowledge” is incompatible with Dewey’s naturalist epistemology. The reason is that the idea is abstract and theoretical. Dewey identifies such ideology to be idealistic and identifies it as one of the consequences of traditional epistemology that sees knowledge as non-practical. A naturalist epistemologist is interested in the kind of knowledge that has practical effects on human/nature symbiotic relation.

The third objection is that Dewey conflates the “function” of knowledge with its identity and consequently presents a vague phenomenon. The point of the objection is that, while the functions of knowledge may give us general idea about what the phenomenon is, it won’t be a contradiction to find a phenomenon whose identity is impossible to glean from its function. There are two ways of answering

⁶⁴ A similar problem can be seen in Dewey’s concession that his use of “indeterminate situation” and “doubtful situation” as synonymous is also vague. For him, while “indeterminate situation” points to a pre-inquiry existential situation, “doubting” correlates with inquiry (J. Dewey, 1968, pp. 326-329).

⁶⁵ However one can argue that the idea of “publish or perish” in the academics can also make the career of an academician a good example of human activities responding to “problematic” situations.

this challenge. First, one can counter-argue that the challenge is a demand for definition of knowledge. Although Dewey defines knowledge in various ways, he warns about how dialectical definitions could be misleading.⁶⁶ He also argues that epistemologists cannot rely on definition because some phenomena are not even define-able in concise ways. This is one of the reasons for his adoption of denotative methodology which we have discussed in section 3.3.2.

A stronger way of responding is that “knowledge” belongs to that category of tools in which their functions define their identity. According to Dewey, it is a form of bias for a human “to think of tools solely in relation to himself”. I argue that determining the identity of tools strictly by the names given to them by human is one of these biases. Rather, Dewey argues that the identity of a tool lies in “its primary relationship toward other external things, as hammer to the nail, and the plow to the soil” (J. Dewey, 1925, p. 103). His point is that in the relation of a hammer alone lies its function.

However, Fred Newman and Lois Holzman seem to disagree with Dewey’s citing of hammers as an example of tools whose identity is defined by their function. According to these scholars, hardware store tools such as hammers only become identified and recognized with certain function in the process they called reification (Newman & Holzman, 1993, p. 36). However, Dewey’s argument that a tool derives its identity through its functions is strongly supported in their description of what they called “the toolmaker’s tool”:

While purposefully, it is not distinguishable from the result achieved by its use. Explicitly created for the purpose of helping to make a specific product, it has no reified pre-fabricated social identity independent of that activity. Indeed, empirically speaking, such tools are typically no more recognizable as tools than the product... It is the productive activity which defines both- the tool and the product (the result) (Newman & Holzman, 1993, p. 36).

Another form of objection can be seen in Kadlec’s claim that Dewey abandoned instrumentalism for experimentalism (Kadlec, 2007, p. 19). This is an objection

⁶⁶ For instance, in *Experience and Nature*, Dewey defines knowledge as “a work of art” that “confers upon things traits and potentialities which did not previously belong to them” (J. Dewey, 1925, p. 309). In this sense, knowledge is being presented as an act.

because it suggests that Dewey dropped the former notion for the latter because they are incompatible or because along the line, instrumentalism became untenable. It can also be interpreted to mean that there are no differences between the two concepts. I will reject these suggestions. Consequently, the next discussion focuses on Dewey's notion of experimentalism. I examine Robert Dewey's claim that Dewey "somewhat arbitrarily restricts the term, "knowledge" to cases fitting his own theory or when he over-generalizes from experimental contexts of knowing to non-experimental contexts" (R. E. Dewey, 1977, p. 167). Consequently, my research questions include: What are the non-experimental contexts that are beyond Dewey's experimental scope? To what extent are these non-experimental contexts to serve as constraints on Dewey's position? In addition, I examine the relationship between Dewey's instrumentalism and experimentalism.

3.5 A critical examination of the nature and role of experimentalism in Dewey's epistemology

In chapter two, we discussed Dewey's contention that a naturalistic analysis of experience "affords a model for a conception of experimental inquiry and of reflections efficacious in action"(J. Dewey, 1925, p. 79). We discussed his account of how experience reveals that "all reflection sets out from the problematic and the confused" and "aims to clarify and ascertain" and "closes in transforming the disordered into the orderly, the mixed-up into the distinguished or placed, the unclear and ambiguous into the defined and unequivocal, the disconnected into the systematized" (J. Dewey, 1925, pp. 57-58). I will not repeat these arguments again. Rather, I focus on the question: How different is Dewey's use of experimentation from what obtains in science?

In *Experience and Nature*, Dewey describes how his naturalist conception of inquiry necessarily involves experimentation. He writes:

Inquiry is the directed or controlled transformation of an indeterminate situation into a determinately unified one. The transition is achieved by means of operations of two kinds which are in functional correspondence with each other. One kind of operations

deals with ideational or conceptual subject-matter. This subject-matter stands for possible ways and ends of resolution. It anticipates a solution, and is marked off from fancy because, or, in so far as, it becomes operative in instigation and direction of new observations yielding new factual material. The other kind of operations is made up of activities involving the techniques and organs of observation. Since these operations are existential they modify the prior existential situation, bring into high relief conditions previously obscure, and relegate to the background other aspects that were at the outset conspicuous (J. Dewey, 1991, p. 121).

Again, in *The Quest for Certainty*, Dewey presents what he calls “the traits of experimental inquiry” and how these traits are essential in formulating a theory of knowledge and mind in relation to nature:

They exhibit three outstanding characteristics. The first is that all experimentation involves overt doing, making of definite changes in the environment or in our relation to it. The second is that experiment is not a random activity but is directed by ideas which have to meet the conditions set by the need of the problem inducing the active inquiry. The third and concluding feature, in which the other two receive their full measure of meaning, is that the outcome of the directed activity is the construction of a new empirical situation in which objects are differently related to one another, and such that the consequences of directed operations form the objects that have the property of being known (J. Dewey, 1930, pp. 84-85).

Dewey’s point is that experimentation *necessarily* involves some existential re-arrangement or manipulation of nature. This rules out the use of thought experiment as an independent method because there is no existential requirement in the practice of thought experiments. This existential requirement also further buttresses Dewey’s contention that knowledge is an existential phenomenon. In *Experience and Nature*, Dewey writes about how naturalistic analysis of experience affords a model for experimental inquiry and of reflections efficacious in action” (J. Dewey, 1925, p. 79). This is because “the conjunction of problematic and determinate characters in nature renders every existence as well as every idea and human act, an experiment in fact, even though not in design” (J. Dewey, 1925, p. 61). The reason is that the dynamic nature of Nature makes natural activities “experimental” in the sense that certain reactions always follow some forceful or manipulative activities elsewhere. Several new situations are potential consequences of the present state of affairs. However, while natural non-human events (such as hot magma resulting in volcanic eruptions) are

arguably without purposes, activities in nature that are consequences of human manipulations are purpose-oriented. Human acts are experimental because they are goal-directed or serve as means to some anticipated ends. Certain human activities are chosen among several options on the hypothetical basis that they have more potential to actuate the anticipated results than their alternatives.

The final point is that is that experiments necessarily bring out new states of affairs, new problems and new forms of inquiry. Further on this point, Dewey writes:

In my *Logic*, I have explicitly pointed out that one chief reason why the introduction of experimental methods meant such a great, such a revolutionary, change in natural science, is that they provide data which are new not only in detail but in kind. Hence their introduction compelled new kinds of inference to new kind of subject-matters, and the formation of new types of theories- in addition to providing more exact means of testing old theories (J. Dewey, 1968, p. 337).

Three points are notable in Dewey's position. The first is that Dewey's notion of experimentation is a replica of experimentation in science. The second point is that his experimentalism concerns significantly the development and growth of human knowledge rather than the possibility of knowledge. The third point is that his notion of experimentalism renders human beings as natural problem-solving experimenters. As rightly noted by Robert Dewey, John Dewey conceived man as "first and foremost a future-oriented problem-solving animal whose characteristics and activities evolved from, but remain continuous with processes taking place on the so-called lower levels of life"(R. E. Dewey, 1977, p. 44). I will now discuss some criticisms of Dewey's notion of experimentalism.

3.5.1 Some criticisms of Dewey's notion of experimentalism.

Firstly, the impression in Dewey's discussion is that his notion of experimentalism is modelled after scientific practice. He mentioned how his notion of experimentalism involves the use of hypothesis and how it could engender prediction. However, he was silent on any possibility of his experimentation being guided by any form of laws as it is the usual case in science. I think Dewey's subscription to evolutionary theories, his recognition of the biological needs of

human beings and their striving to satisfy them, makes all scientific laws in these areas relevant to his notion of experimentation. What a law needs to recognise and become relevant to Dewey's position is that it is possible to have "conversion of undirected changes into changes directed toward an intended conclusion" (J. Dewey, 1930, p. 196). "The types of laws that are not acceptable to him are those that state that "the future and the past belong to the same completely determinate and fixed scheme" (J. Dewey, 1930, p. 193).

Secondly, it seems Dewey's use of the word "experiment" is so ambiguous that every problem-solving human action targeting some identifiable goal will qualify as "experimentation". For instance, when a first-year student is deciding whether to choose a logic course in Philosophy or a course in sociology, as far as Dewey's notion of "experiment" is concerned, the student is "experimenting" just like a chemist mixing various chemicals in the laboratory. Following Dewey's notion of "experimentation", the undergraduate student who is trying to decide which course to take, has an end-in-view that created the need for choice in the first instance: getting the best grade, getting the best exposure to knowledge, and so on. Consequently, evaluation of choices is determined hypothetically in relation to the possibility of this end-in-view. This description matches what Dewey call "operational facts"; "a theoretical recognition of what is involved when inquiry satisfies the conditions imposed by the necessity for experiment" (J. Dewey, 1991, pp. 116-117). In addition, the choice will herald new situations: attending a new class consisting of new people and creating new relationships, new challenges and further needs for making decisions and choices.

However, according to Robert Dewey, these kinds of problem-solving human activities are better regarded as non-experimental contexts (R. E. Dewey, 1977, p. 167). His point is that the word "experiment" is reserved for highly regulated activities meant for the establishment of some specific network of knowledge and not for actions done at random. I think Dewey reconceptualises the notion and procedure of experimentation by "de-technicalising" it. Consequently, the orthodox or technical notion should not be confused with his common-sensical notion. Consequently, the suggestion from Dewey's notion of experimentation is

that, for all problematic cases, the same methodological approach is needed- the use of a hypothesis which “can instigate and direct an experiment that will disclose precisely those conditions which have the maximum possible force in determining whether the hypothesis should be accepted or rejected” (J. Dewey, 1991, pp. 115-116). For Dewey, “experimental procedure carries with it the idea of continuous reconstructions of the ideas” (J. Dewey, 1968, p. 187). However, it must be noted that these reconstructions and modifications of ideas or hypotheses are done in conjunction with their material or factual implications.

How does Dewey’s notion of instrumentalism fit into his notion of experimentalism? In *Problems of Men*, Dewey explains how his experimentalism opposes doctrinal absolutism and rigid conceptualism. These are two pejorative concepts he uses to describe the practice of making facts “conform to concepts that are framed independently of temporal or historical change” (J. Dewey, 1968, pp. 136-137). According to him, all natural events are dynamic and the perils that come with it, perpetually renders experience of human beings to be experimental and forces them to see nature as the instrument of multiple control. Consequently, both experimentalism and instrumentalism are consequences of Dewey’s naturalist conception of pluralistic and dynamic reality and human experience. Both concepts are indispensable in his epistemological naturalism and are mutually entailed. The possibility of adapting what previously existed to accomplish a purpose, requires an instrument that passes through an experiment.

3.6 Chapter summary

In this chapter, I examined Dewey’s naturalistic epistemology. In section one, I explored the link between his naturalistic metaphysics and epistemology in terms of how the features of reality necessitate the features of every aspects of human knowledge and other epistemological concepts such as truth, inquiries, and justification. For instance, for Dewey, human knowledge is empirical, practically dynamic, pluralistic, and inherently experimental because nature (which is the object of knowledge) possesses those traits. In addition, the continuity of natural events determines the continuity and open-endedness of inquiries and the

contextual nature of knowledge. The empirical nature of reality warrants the appropriateness of empirical methodological approach. Justification and functions of knowledge are determined in terms of the possibility and extent of human success in the goal of manipulating and re-ordering events in the physical world for the realization of human purposes such as survival.

Three significant morals are established in the section. Firstly, I articulate how Dewey's position refutes some traditional epistemologists whose works suggested that metaphysics can be dismissed without any adverse effects on epistemology or who thought that epistemological investigations can be carried out without explicit reference to metaphysical theories. On the contrary, for Dewey, human knowledge is essentially an existential affair in a peculiar sense- its understanding cannot be achieved without reference to other events going on in the world. This point underscores Dewey's contention that naturalistic metaphysic functions as road-map for theories of knowledge. These ideas form the basis for describing Dewey's position as epistemological naturalism. The second moral is that most traditional epistemological problems are avoidable if their non-naturalistic foundations are de-activated. I explore Dewey's argument that some problematic notions about knowledge such as certainty, non-practical and dispassionate objectivity, are legacies from transcendental metaphysics of the Greeks. The third moral is that the section refutes the claims of some critics who contend that some features or claims in Dewey's naturalistic metaphysics foreclose the possibility of a substantive epistemology.

In the second section, I explored Dewey's presentation of the denotative method as a proto-type of scientific methods and concluded that the method emulates several practices in scientific approach to issues such as empirical experimentation, repeated and repeatable testing, and the use of hypothesis. More importantly, the section explored what Dewey meant by "denote" to underscore the peculiarity of the method. According to him, some phenomena are not explicitly definable but have communicative meaning in the sense that we can identify activities that denote their presence or existence. To have an adequate understanding of them (or metamorphous from communicative meaning to

cognitive meaning) Dewey suggested that those activities through which they are denoted must be reconstructed. Consequently, the use of denotative method is necessitated by the nature of certain phenomena (such as what Dewey calls esthetic or non-cognitive experience) that scientific methods may not be adequate to contend with. Its usage also provides empirical way of studying the natural origin of these phenomena in human transaction within nature and expose them to scientific understanding. This is a pointer to the uniqueness of Dewey's clamouring for scientific foothold in epistemology. This is a foothold that does not engender reductionism or lead to scientism.

I considered an objection that Dewey's proposed methodology is vague because there is no distinction between it and the core themes in his metaphysical and epistemological theories such as instrumentalism and experimentalism. I defended Dewey's position by arguing that the entailment between his methodology and other themes in his philosophy is because they are all consequences of his naturalism. I further argued that this entailment is a pointer to consistency rather than a problem.

In the third section, I discussed Dewey's instrumentalist conception of knowledge. It emphasised how the view is a consequence of Dewey's claim that inquiry is actuated by problematic human transaction and that a claim to knowledge is warranted when this problem is solved. Consequently, the attainment of knowledge is demonstrated when a portion of nature or an event in nature is purposefully and successfully manipulated or transformed. I considered some objections to this view that regards knowledge as a tool. One objection is that not all knowledge is instrumental because some knowledge is actuated by curiosity and excitement for discoveries (such as scientific explorations) and consequently are not attached to solving any problem. I responded by arguing that Dewey's use of "problematic situations" should not be read as entirely life-threatening occurrences but what provokes creative thinking and activities. His problematic situations should be read as challenges. Besides, Dewey argues that all forms of knowledge is instrumental because knowledge ultimately serve some specific

human purposes: whether it enlarges the scope of human knowledge, allays fear or satisfies curiosity.

I also considered the objection that, rather than addressing the kind of general knowledge that traditional epistemology studies, Dewey restricted his attention to human or humanistic knowledge. I responded by arguing that the notion of a general knowledge is abstract and theoretical, and consequently unacceptable in a naturalist epistemology that concerns world-transforming practical knowledge.

In the fourth section, I considered the notion and significance of Dewey's experimentalism, most especially how it underscores his view that knowledge is practical and that a knower cannot be a spectator. Dewey's point is that experimentation *necessarily* involves some existential re-arrangement or manipulation of nature. This existential requirement also further buttresses Dewey's contention that knowledge is an existential phenomenon. I explored the cogency of his argument that "the conjunction of problematic and determinate characters in nature renders every existence as well as every idea and human act, an experiment in fact". The dynamic nature of Nature makes natural activities "experimental" in the sense that certain reactions always follow some forceful or manipulative activities elsewhere. Several new situations are potential consequences of the present state of affairs. Human acts are experimental because they are goal-directed or serve as means to some anticipated ends. Certain human activities are chosen among several options on the hypothetical basis that they have more potential to actuate the anticipated results than their alternatives. Finally, I discussed his point that experiments necessarily bring out new states of affairs, new problems and new forms of inquiry.

Generally, in the chapter, I explored how Dewey's naturalistic epistemology shares the normative concerns of traditional epistemology by making provision for the avoidance of error. I argued that sharing this concern provides evidence of continuity between traditional epistemology and Dewey's naturalist epistemology. However, while traditional epistemologists strive to prevent errors by establishing criteria that will provide necessary and sufficient conditions for

claims to knowledge and engender certainty, Dewey rejects this approach as theoretical. Alternatively, he aims to secure human interests (such understanding nature for adaptation and survival) by considering how practical and experimental manipulations of nature can be employed.

Chapter Four:

Renaissance or decline: the problem of identifying the original ideas of Dewey in Rorty's neo-pragmatism

4.0 Introduction:

In this chapter, I discuss the problem of identifying the original ideas characterising John Dewey's work in the philosophy of Richard Rorty. There are two reasons that make it natural to choose to discuss Rorty here over other contemporary philosophy with pragmatist inclinations. First, Rorty's philosophical position is usually described as neo-pragmatism because he draws inspiration from classical pragmatists such as Dewey, Peirce, and James. Rorty identifies himself as a Deweyan (2000e, p. 7). He acknowledges the impact of Dewey's philosophy on his influential works such as *Consequences of Pragmatism* and *Philosophy and the Mirror of Nature*. He pointed out that the influence from Dewey was deeper than the inspiration he received from Wittgenstein and Heidegger (Rorty, 1979, p. 5; 2010, p. 19).⁶⁷ He identifies with positions in Dewey's philosophy such as anti-foundationalism (1979, p. 6), anti-representationalism (Rorty, 1982, p. xix; 1991, p. 5; 2000e, p. 5), and experimentalism (2010, pp. 21-22). Secondly, Rorty has been described as the philosopher "who single-handedly brought into being a renaissance for pragmatism" (Misak, 2010, p. 27). The suggestion then is that Rorty's neo-pragmatism is a modern version of (Dewey's) pragmatism and consequently provides a good ground for examining the continuity of Dewey's original philosophical ideas.

However, philosophers such as Hildebrand rightly notes that Rorty denies that there could be "an accurate" rendering of a philosophical position (Hildebrand, 2003, p. 88). A number of scholars have described Rorty's position as "anti-philosophy" because of his often quoted declaration that philosophy has come to an end (Blum, 1990; D. E. Cooper, 1993). Consequently, Rorty's position is

⁶⁷ The influence of Dewey on other neo-pragmatist philosophers such as Putnam has been noted as well (Hildebrand, 2003, p. 87).

regarded as a direct opposite of the “optimism about a future for philosophy” often attributed to Dewey (Kitcher, 2012, p. xiv). However, Rorty distinguishes between “philosophy” and “Philosophy” and suggests that the latter has come to an end by urging the development of a post-Philosophy culture (Rorty, 1982, pp. xxxvii, xl). I contend that both Rorty’s two senses of philosophy and the idea of a post-Philosophical culture, contradict the “continuity thesis” that we have established in chapters one to three, as prominent in Dewey’s philosophy.

Is Rorty a Deweyan? How can those differences be interpreted: as developments or as rejections of Dewey’s original positions? Three suggestions made by some scholars will be explored. The first is that most fundamental differences in the works of these two philosophers are largely consequences of their differences on some metaphysical issues⁶⁸ or differences “in the worlds they inhabit” (Shusterman, 1994, pp. 391-392). The second is that Rorty was correcting “Dewey’s privileging of natural sciences over literary culture” (Shusterman, 1994, p. 391). The third is that Rorty recasts (or misinterprets) Dewey along traditional philosophical lines and consequently warrants reclassification with Dewey’s past critics (Hildebrand, 2003, pp. 87, 89).

While agreeing that these suggestions are useful, I contend that more is needed to answer the question. Further suggestions that will be articulated and explored are: (i) that Rorty over-stretched some interpretations of Dewey in many ways to suit his own (non-Deweyan or anti-Deweyan) position, such as his recommendation that Philosophy should be replaced with literary criticism or cultural politics (Rorty, 1989, p. 82; 2007), (ii) that Rorty was preoccupied with linking Dewey with other philosophers, such as Heidegger and Nietzsche (Rorty, 2000a, pp. 237 - 239) and that this preoccupation created tensions in Rorty’s presentation of Dewey’s original position because the differences in the works of these philosophers overshadow the similarities that Rorty was presenting, and (iii)

⁶⁸ Shusterman provides two instances of such disagreements. First, differences created by Rorty’s stating the problems between representationalism vs anti-representationalism in terms of words and sentences rather than Dewey’s focus on ideas and experiences. Secondly, Rorty’s refusal to “countenance philosophical discourse that traffics, as Dewey’s does, non-linguistic entities like experience and ideas” (Shusterman, 1994, p. 391).

that Dewey and Rorty have two radically different versions of naturalism that led to different notions of metaphysics, epistemology and theories of language.

This section is not a critique of Rorty's entire neo-pragmatist philosophy. It is rather a critique of Rorty's understanding or presentation of Dewey's philosophy and a critique of Rorty as a self-professed Deweyan. Most of these arguably anti-Deweyan positions in Rorty are extensively discussed in *Philosophy and Mirror of Nature* and defended in subsequently published works such as *Objectivity, Relativism and Truth* and *Consequences of Pragmatism*. The consistency of Rorty on these seeming anti-Deweyan arguments or claims suggest that these incompatible issues are not mere slips of the pen. Consequently, my target is to articulate some of these anti-Deweyan positions in Rorty's work and contrast them with Dewey's original positions.

This chapter has five sections. Section one discusses briefly some of the claims shared between classical pragmatists and neo-pragmatists. I also note the differences among the neo-pragmatists in terms of the levels of compatibility between their positions and the works of the classical pragmatists. I did not attempt to define pragmatism. I agree with critics of pragmatism who have argued that there are as many versions of pragmatism as there are pragmatists (Lovejoy, 1908).

Section two discusses the rejection of foundationalism and the adoption of coherentism in Rorty's work and how he thinks holding both views makes him a Deweyan pragmatist. Section three discusses Rorty's rejection of representationalism and how this provides one of the bases for his rejection of metaphysics. I critique Rorty's position by contrasting his position with Dewey's position on representationalism and metaphysics. Section four compares Rorty and Dewey's views on the realism versus antirealism debate, as a fall-out from their differences on the tenability of metaphysics. Section five discusses the differences and similarities between their versions of naturalism and how the differences out-weighed the similarities, providing the most important desideratum for separating Rorty's philosophy from Dewey's.

4.1 From pragmatism to neo-pragmatism

Several philosophers have shown the futility of various attempts to define generally what pragmatism is (Hacking, 2007, p. 33; Misak, 2007, p. 1).⁶⁹ Consequently, scholars have taken the tactical approach of enumerating and analysing some fundamental ideologies that are common among pragmatists. For instance, Misak discussed what she called “pillars of pragmatism” which include: the claims that “objectivity comes into being and evolves over time” (2007, p. 2) and that “knowledge has no foundation” (2007, p. 2). Hacking described this rejection of foundations as “fallibilism”- the view that “all beliefs are fallible” (2007, p. 35). A similar approach is also commonly used in defining neo-pragmatism. Some common views define a neo-pragmatist in relation to one or several classical pragmatists. For instance, for Kitcher, “central to classical pragmatism” is an impulse to reform, a yearning for “reconstruction of philosophy” (2012, p. xii). Consequently, he sees himself, Richard Rorty, Hilary Putnam, and Robert Brandom as neo-pragmatists who have been moved to “renew” pragmatism (Kitcher, 2012, p. xiii).

Is “neo-pragmatism” a mere label? Ian Hacking thinks it is and claims not to care. He designates Rorty’s philosophy as “neo-pragmatism” to indicate a “new pragmatism” after noting Rorty’s admiration for Dewey but couldn’t possibly “see Peirce having had much sympathy for Rortyan conversation as the terminus of philosophy” (Hacking, 2007, p. 33). However, some scholars seem to have seen more than labels and consequently made distinctions between “neo-pragmatism” and the new breed of pragmatism usually referred as “new pragmatism”.⁷⁰

⁶⁹ Lovejoy, A. O. presented thirteen different definitions of pragmatism most of which he argued are contradictory to one another. (Lovejoy, 1908, Part I: Vol. 5:1, 2 January 1908, pp. 5-12 and Part II: Vol. 5:2, 19 January 1908, pp. 29-39).

⁷⁰ Misak, for instance, writes that, “Ian Hacking calls Rorty’s view ‘neo-pragmatism’ to distinguish it from classical pragmatism. I’m happy enough to put up with the infelicity and distinguish Rorty’s neo-pragmatism from what I am calling ‘new pragmatism’” (Misak, 2007, p. 1).

What is the basis for making distinctions between Rorty's neo-pragmatism and "new pragmatism"? For instance, commenting on David Macarthur and Huw Price's view that the "new pragmatists" "wants to dismiss or demote metaphysical puzzles in favour of more practical questions, about the roles and functions of the matters in questions in human life", Misak writes that,

This is indeed what lies at the heart of pragmatism and the hope is that the new pragmatists can connect our philosophical concepts of truth, rationality, and norms to the practices which are so central to human life – science, ethics, and politics (Misak, 2007, p. 3).

Misak thinks this is the most important distinctions between the position of Rorty as a neo-pragmatist and the "new pragmatists". But it is arguable that the neo-pragmatists want this too. However, the irreconcilability in the positions of new pragmatists and neo-pragmatists becomes more glaring when one compares the preoccupation of the former (building on classical pragmatism) with Rorty's claim that the consequence of his neo-pragmatism is that "post-Philosophical culture" replaces philosophy, as traditionally construed.

If Rorty's views reconcilable neither with the views of the classical pragmatists nor with the views of the new pragmatists, is designating his position as neo-pragmatism a misnomer? Would it be more appropriate to describe his position as "post-pragmatism"? To what extent can an ideology be different from classical pragmatism and still be regarded as a pragmatic ideology? While these questions are important for an extensive understanding of pragmatism and its successors, I did not attempt such a huge project in this chapter. Rather, I focus on a limited (but no less significant) aspect of the project which is examining "theoretical foundations" that link Rorty's neo-pragmatism to Dewey's philosophy to see whether he is a Deweyan pragmatist or not.

4.1.1 Rorty's critique of traditional and modern epistemology and the quest for the Deweyan in Rorty

In many of his works, Rorty has repeatedly acknowledged the influence of Dewey (Rorty, 1979, p. 5; 2010). He attributes his (successful) preoccupation with how to

put Wittgenstein and Heidegger in the context to the influence of Dewey (Rorty, 2010, p. 19). Among these inputs from Dewey, the most prominent in Rorty's work include the rejection of foundationalism, representationalism and essentialism. His arguments against these theories provide major premises for his position on the notions of truth, knowledge, his conception of pragmatism and critique of metaphysics.

In this section, I discuss Rorty's critique of foundationalism, understood as "the supposition that knowledge needs foundations"(1979, pp. 168-172). While this critique covers his views both on traditional epistemology and metaphysics, for this section, I concentrate on the epistemological aspects and argue that Rorty rejects traditional and modern epistemology, based on his polemics against foundationalism to pave the way for a post-Philosophical tradition. I shall not attempt an assessment of whether Rorty is successful or not in his arguments for a post-Philosophical tradition. I focus only on whether he is successful in his argument that rejection of foundationalism, adoption of coherentism and dismissal of epistemology are all embedded in Dewey's philosophy but in a confused way.

I start the discussion with Rorty's exposition and critique of foundationalism and then compare his criticisms of foundationalism with Dewey's. I discuss two possible alternatives to foundationalism suggested in Rorty's work: replacing foundationalism with coherentism or replacing epistemology (or Philosophy) with post-Philosophy culture. I discuss and critique the first by considering a sense in which Dewey is a foundationalist without compromising his conceptions of reality and knowledge as dynamic or evolving. I then explore Rorty's suggestion about the necessity of a post-Philosophy culture and argue that such claim is not compatible with Dewey's position. Finally, I consider whether Dewey advocates for the dismissal of epistemology.

4.1.2 Rorty's idea of foundationalism

Foundationalism is a traditional approach to epistemic justification. Foundationalists recognize that justification of beliefs cannot be endless.⁷¹ Consequently, they contend that justification consists in basic beliefs serving as ultimate ground for less basic beliefs. Foundationalists use several adjectives to describe the feature of “basic beliefs” that warrants their “foundational” role in the process of justification. These “basic beliefs” are often described as credible, certain, indubitable, incorrigible and infallible (Ayer, 1956, p. 19; Hamlyn, 1970, p. 35; Lewis, 1946, p. 333; Locke, 1952, p. 309). Rene Descartes' conception of “clear and distinct ideas” and how they generate indubitable beliefs (1969, pp. 144-149) and Plato's theory of archetypal “Forms” and the role they play in the acquisition of knowledge in the physical world in Plato's *Republic*, are sometimes referred to as examples of the “foundations” of knowledge .

In *Philosophy and the Mirror of Nature*, Rorty gives prominent attention to the exposition and criticisms of foundationalism. He explains his understanding of “foundation” and gives an account of how of foundationalism became the focus of epistemology.

[The] notion of “foundations of knowledge”-truths which are certain because of their causes rather than because of the arguments given for them-is the fruit of the Greek (and specifically Platonic) analogy between perceiving and knowing (Rorty, 1979, p. 157).

Again, he writes:

[T]he desire for a theory of knowledge is a desire for constraint – desire to find “a foundation” to which one might cling, frameworks beyond which one must not stray, objects which impose themselves, representations which cannot be gainsaid.... The notion that there is a permanent neutral framework whose “structure” philosophy can display is the notion that the objects to be confronted by the mind, or the rules which constrain inquiry are common in all discourse... (Rorty, 1979, pp. 315-316).

⁷¹ An endless process of justification is usually referred to as an “infinite regress” which is interpreted to indicate that justification is unsuccessful.

In these passages, Rorty uses “foundationalism” in two important ways. Firstly, it is used to refer to thesis stating that justification is a special relation between ideas (or words) and objects (Rorty, 1979, p. 170). Objects are referred to as “foundations” because beliefs that are justified are regarded as “caused” by those objects.⁷² We can call this sense of foundationalism epistemological. The second sense covers a wider spectrum than a theory of knowledge or justification. It concerns the role of philosophy in terms of identifying and establishing neutral frameworks for “all discourse” interpreted as all human cognitive practices. We can call this notion of foundation the philosophical sense. The distinction between these senses of “foundation” is important for the understanding of how Rorty links his dismissal of philosophy with his rejection of foundationalism. At this point, I will concentrate on his view on the epistemological sense of foundation.

Understanding Rorty’s notion of foundationalism also requires understanding the way he uses two important concepts: “constraint” and “confrontation”. He uses these concepts to describe the relationship between the knower and the known. He uses “constraint” in his interpretation of the contention of foundationalists that the process of justification cannot be complete without reference to the causal relationship between beliefs/propositions and their objects. For him, this causal relationship is regarded as guaranteeing necessary and objective truths. This is what he describes pejoratively as the “grip” of the object upon the knower. Rorty uses “confrontation” to refer to what we can describe as the obligations of the knower, most especially proving the ability of the human mind to engage the world by mirroring it. (I will discuss this view more extensively in section 4.3.) For Rorty, the popular acknowledgement of this “constraint” as a guide to necessary

⁷² For Rorty, the idea that only reality of which we are certain can provide “foundations” makes “foundationalism” a theory involving both epistemological and metaphysical claims, due to “the Platonic Principle” that states that “differences in certainty must correspond to differences in the objects known (Rorty, 1979, p. 156). While one might regard as contentious the idea that mathematics fits into the causal model stated above, Rorty’s point is that philosophers such as Plato were impressed by “the special characters of mathematical truth” which are “certainty” and demonstrable “necessary truths” and consequently were preoccupied with the articulation of a model of knowledge that can reflect such characters.

truths and the commitment to this “confrontation” as what defines the autonomy of philosophy,⁷³ reduce traditional epistemology to foundationalism.

4.1.3 Rorty’s critique of foundationalism

Rorty identifies with Dewey by tracing the origin of foundationalism to the philosophers’ search for *the immutable* in Greek metaphysics, exemplified by Plato’s metaphysics (J. Dewey, 1925, pp. 77, 79; 1930, pp. 28-49; Rorty, 1979, p. 156). Both acknowledged how the quest for the “foundations” of knowledge was sustained and became one of the priorities in modern epistemology through the works of philosophers such as Descartes who regarded the establishment of indubitable foundations as one of the most important goals of epistemology (J. Dewey, 1925, pp. 188, 276; 1930, p. 61; Rorty, 1979, p. 6). Both philosophers understood that the quest for foundations by traditional and modern epistemologists is a consequence of the idea that knowledge involves certainty (J. Dewey, 1930).

Rorty rejects foundationalism as an essential step towards embracing pragmatism for several reasons. First, he contends that the notion of “foundation” of knowledge *is based on analogy with the compulsion to believe the existence of an object when directly perceiving it* (1979, p. 162). Rorty actually got this argument from J. Dewey (1930, p. 26). This idea is expressed in statements describing naïve realism as “seeing is believing” or via the notion that only physical objects can provide concrete evidence.⁷⁴ While Rorty commends Heidegger for tracing the root of this analogy (between perception (or vision) and theory of justification) to Plato’s notion of “objectivity”⁷⁵, he argues that “the West became obsessed with

⁷³ For instance, Rorty contends that “Descartes’ invention of mind-his coalescence of beliefs and sensations into Lockean ideas-gave philosophy a new ground to stand on” (Rorty, 1979, p. 136).

⁷⁴ A good example is in G.E. Moore’s “Common-sensism”. See, G.E. Moore, (1959) “A Defense of Common Sense”, in *Philosophical Papers* (London: George Allen and Unwin), Pp. 32-59.

⁷⁵ Rorty mentioned how Plato identified “reality” of a thing with “its presence before us” (Rorty, 1979, p. 162). However, a more comprehensive account of how foundationalism can be traced back to Plato and Aristotle. Both philosophers were said to have used “visual perception” as a model for talking about knowledge in the sense that when perception takes place, we have the idea of “something outside that is realized inside”. This led to the idea of “inner” and “outer” distinctions, “mental representations”, “Cartesian theatre with ideas”, and so on (Palmer, 2005).

the notion of our primary relation to objects as analogous to visual perception” through the Aristotle-Locke analogy of knowledge as perception (1979, pp. 162-163). Rorty rejects the idea of Plato’s objectivity and the analogy between visual perception and knowledge. He contends that the idea of “foundation of knowledge” is a product of the choice of perceptual metaphor- “the mirror of nature”, which there is no compelling reason to adopt (1979, p. 159).

The second argument Rorty raised against “foundationalism” is that there was a confusion between empirical knowledge (and its objects), on one hand, and mathematical knowledge (and its objects), on the other hand (1979, p. 158). For him, while the “necessity” of the truth of geometrical axioms (as an example of necessary truths) are supposed to have no need of justification, of argument, of discussion because they are un-discussable, the truth of empirical claims need justification. A simple way of expressing what Rorty meant is that mathematical truths are self-justifying. For Rorty, if there is any doubt about the truth of mathematics, it would be on the part of human reasoning or applications and not about the corrigibility of mathematical theorems or formulae.⁷⁶ With the objection raised against requiring necessary truths in empirical matters, Rorty rejects the Platonic idea of “foundations of knowledge”. Consequently, Rorty claims to follow a non-foundationalist path like Dewey by denying that there are beliefs that provide absolute foundations for our knowledge of the external world. This is the kind of foundation that Descartes believes can be used in refuting the epistemological sceptic who denies the possibility of knowledge (1979, p. 6).⁷⁷

⁷⁶ This argument against foundationalism derives support from some philosophers whose works are regarded as classics in the history of philosophy. This claim was more succinctly expressed in Hume’s distinctions between matters of facts/existence and relations of ideas. For Hume, while the denial of any truth concerning relations of ideas invariably leads to self-contradiction, the “contrary of every matter of fact is still possible, because it can never imply a contradiction” (Hume, 1973, p. 129). The idea is also expressed in the distinction between analytic and synthetic truths which arguably is an artifact of Leibnizian and Kantian philosophy.

⁷⁷ However, it is arguable that the distinction between mathematical truths and empirical knowledge that Rorty wanted to use to reject foundationalism will lose considerable strength if it is proven that mathematic truths are invented by human beings rather than being discovered. Consequently, it would be interesting to explore Plato’s argument that mathematical truths are discovered in contrast with Dewey’s argument that mathematics, logic and science are “instruments” created by human beings to control nature. However, this pursuit is beyond the scope of this work.

Rorty argues that if the purpose of the “foundation” metaphor is to avoid the problem of infinite regress in our process of justification or to guard against the scepticism about reality that can be inferred from perceptual errors (such as illusion and mirage), “we can think of knowledge as a relation to propositions and thus justification as a relation between the propositions in question and other propositions from which the former may be inferred”. More importantly, we can hold a proposition as justified when “everyone, or the majority, or the wise, are satisfied” (Rorty, 1979, p. 159). In this regard, we can talk about “knowledge” and “justification” without mentioning any “foundation”. What is being suggested here is that, analysing knowledge in terms of *relations among propositions* is more viable than foundationalism as a theory of justification. From this suggestion, two important characterizations emerged concerning Rorty’s anti-foundationalist stance. The first of these is coherentism. The second characterization is that Rorty envisages a post-Philosophy culture in which conversation replaces philosophical theories. I briefly discuss these two characterizations before determining their compatibility with Deweyan philosophy.

4.1.3.1 The idea of coherentism in Rorty’s anti-foundationalism

Some arguments in Rorty’s work suggest that he sees the adoption of “coherentism” as an inevitable consequence of his rejection of foundationalism and representationalism. In *Truth and Progress*, Rorty writes:

... We deny that the search for objective truth is a search for correspondence to reality and urge that it be seen instead as a search for the widest possible intersubjective agreement (Rorty, 1998, p. 63).

Again, he writes:

We pragmatists, who have been impressed by Peirce’s criticisms of Descartes, think that both skeptics and foundationalists are led astray by the picture of beliefs as attempts to represent reality, and by the associated idea that truth is a matter of correspondence to reality. So we become coherentists (Rorty, 2000e, p. 5).

Rorty’s main target is to set up a version of coherentism that refutes the traditional correspondence theory of truth. However, he tries to differentiate his version of

coherentism from traditional versions by claiming that it does not imply a coherence theory of truth. While in the traditional versions of coherentism, *the notion of a coherence relation among beliefs* (which provides warrant for their truth) is determined either by consistency between beliefs or entailment among beliefs, Rorty's *notion of coherence is determined by agreement among language users or community of inquirers at the end of an inquiry*.⁷⁸

What does his version of coherentism offer? Michael Williams thinks that Rorty did not take coherentism as a credible alternative to foundationalism. For instance, he observes that, while traditional and modern epistemologists usually consider coherentism as one of the alternatives to foundationalism as theories of justification, "in Rorty's eyes, coherentist epistemology is not really epistemology". The reason is that Rorty thinks that holistic constraints on belief-revision are only loosely constraining, they do not offer "a set of rules which will tell us how rational agreement can be reached on what would settle the issue on every point where statements seem to conflict" (Rorty, 1979, p. 316; Williams, 2000, pp. 209-210). The suggestion is that coherentism is irrelevant in Rorty's envisaged post-Philosophy culture.⁷⁹

However, Barry Allen provides an illuminating way of describing Rorty's coherentism and its importance in his (Rorty's) envisaged post-Philosophy culture:

Rorty "goes all the way" from presence and representation to an entirely linguistic and anti-representational view of knowledge. Knowledge does not require that a Real Something transcend belief and measure the cognitive quality of our conversations. Knowledge revolves entirely within discourse. It is entirely a matter of sentences people believe true, the statements they make, the interlocutors who receive and criticize such statements, the standards they go by. In the eighteenth century, it was said that nothing but an idea can be like an idea. Rorty transcribes this insight in the

⁷⁸Rescher provides a good example of the traditional version of coherentism and coherence theory of truth. According to this theory, the truth of a belief is determined in terms of its "systematization" with other beliefs. A belief is said to be "systematized" if adding it to the existing webs of accepted beliefs, consistency will be maintained (Rescher, 1974). What Rorty wanted to maintain in his version is that the truth of a belief is not "automatic" or a matter of systematization. (Rorty, 2000e, p. 5), especially footnote 13.

⁷⁹ What I think worries William is that he thinks Rorty cannot dismiss traditional epistemology and simultaneously hold coherentism credible without contradicting himself.

register of language: Nothing but a sentence can justify a sentence (Allen, 2000, p. 223).

Three aspects are prominent in Rorty's version of coherentism. First, the concept of "justification" is defined in terms of successful interlocutions or conversations. According to Rorty, "there is no such thing as a justified belief which is non-propositional" (1979, p. 183). The suggestion is that knowledge concerns propositions within our language rather than assumptions concerning some extra-linguistic objects. Consequently, the cognitive quality of our conversations is determined by the relationship between the structure of a language and the consistency of the language users (Rorty, 1979, p. 154). Consequently, a coherentist of this type need not worry about any relation (theoretically) to reality in any attempts to justify a belief. In addition, if one consider Rorty's argument, that we can "give up the notion of an epistemic relation to something in the world," and just rely on "the ordinary causal relations which bind utterances together with utterers' environments" (Rorty, 2000e, p. 18), it follows that epistemological theories are also not necessary. A competent language user presents (or defends) a claim to other competent language users in an epistemic community by using her language proficiency. This is how to "get agreement from other members of a competent audience about what is to be done (Rorty, 2000e, p. 9). The question whether one holds a realist or a non-realist view is inconsequential, since philosophical theorizations in which appeals are made to theories about reality and concepts like truth and knowledge cannot engender "successful interlocutions".

The second feature is that a Rortyan coherentist need not bother about which belief is fundamental or foundational because (Rorty quoting Sellars) "all our beliefs are up for grabs, though not all at once" (Rorty, 2000e, p. 5). The foundationalists needed some "privileged" position to start building knowledge of the external world. The foundationalist needed to demonstrate a linkage with a "Real" something that transcends human beliefs and perceptions about the world to refute sceptics who are denying the possibility of such relationship. Whereas, Rorty's coherentist only needs to be situated within a community of language

users and inquirers to learn the rules for interlocutions and abide by the linguistic practice.

The third point in Rorty's coherentism is that we are to give up an idea of "truth" that is disconnected from the interests or needs of certain people or certain social contexts, since "truth" is nothing over and above *whatever we can arrive at through inter-subjective agreement*. Rorty thinks there is nothing significant left to be said about truth "once one has explicated the distinction between justification and truth by the contrast between present and future justifiability" (2000e, p. 5). For him, "x is true" is reducible to "x is justified" based on the argument that the concept of truth has become redundant in our explication of justification. In agreement with Sellars, Rorty contends that "justification is matter of social practice, and that everything which is not social practice is no help in understanding the justification of human knowledge" (1979, p. 186). He concludes that the social practice of conversation is the ultimate context within which knowledge and justification are to be understood (1979, pp. 389-394).

Barry Allen argues that attempts to understand Rorty's coherentism must go deeper than his critique of foundationalism and representationalism. They extend to his critique of realism (2000, p. 223). He argues that Rorty's contention that "there is no such thing as a justified belief which is non-propositional" (Rorty, 1979, p. 183) is a pointer to this fact. This simply means that, for Rorty, knowledge is all about propositions rather than objects (Rorty, 1979, p. 154). Allen asks how Rorty can hope to make use of an "ordinary causal relation that binds utterances with utterers" in the formulation of his notions of the "justification" or "commensurability" without having anything to do with something extra-linguistic? I discuss Rorty's answer to this kind of question in section 4.3 where Rorty's critique of metaphysics will be explored.

4.1.3.2 Rorty's "conversationalism" and the dismissal of traditional epistemology and Philosophy

Rorty's anti-foundationalism is more popularly associated with the idea that philosophy must give way to a post-Philosophical culture than the suggestion that coherentism should be adopted. This post-Philosophical culture is described as a context where knowledge will become *a matter of conversation and social practice* (1979, pp. 170-171). What is the connection between anti-foundationalism and post-Philosophical culture in Rorty's neo-pragmatism? Two facts are important for understanding Rorty's conversationalism. First, Rorty's identification of foundationalism as the basis for modern epistemology. Second, his distinction between "philosophy" and "Philosophy" and his identification of epistemology as the foundation of Philosophy. Most critics attacked Rorty's conversationalism without reckoning with the distinctions he made concerning his two notions of philosophy and arguably missed the basis of Rorty's contention. For clarity, I discuss his rejection of epistemology and Philosophy separately.

4.1.3.2.1 Rorty's rejection of epistemology

Michael Williams contends that Rorty equates "the demise of foundational epistemology" with the demise of epistemology *tout court*" (2000, p. 209). Barry Allen identifies some ideas meant to portray foundationalism as the bedrock of traditional epistemology that Rorty criticizes. Two ideas are identified as most prominent: the definition of knowledge that Rorty attributed to traditional epistemology and the task he identified as having priority among the preoccupations of traditional epistemologists. Rorty defines knowledge (the subject-matter of epistemology) as "accurate representation, made possible by some special mental processes, and intelligible through a general theory of representation" (Allen, 2000, p. 221; Rorty, 1979, p. 6). Consequently, armed with a theory of knowledge, traditional epistemologists think philosophy can define a "permanent neutral matrix" for the adjudication of any claim to know (Allen, 2000, p. 221; Rorty, 1979, p. 211).

Allen contends that Rorty's choice of definition of knowledge is a bias. He argues that there are different definitions of knowledge in traditional epistemology and that Rorty provides inconclusive argument why the definition he chooses is the generally accepted definition (2000, pp. 221-223).⁸⁰ I think Allen has a good point in here. His point corroborates our earlier contention that Rorty has the habit of criticizing traditional epistemology from selected definitions and theories.

What about Rorty's identification of epistemology with the task of defining a "permanent matrix" for the adjudication of any claim to know"? It is arguable that Allen did not address how Rorty uses this idea in his equating foundationalism with epistemology. What does this idea mean? I contend that Rorty uses this idea to describe the normative conception of epistemology.⁸¹ According to this idea, Rorty was using "foundationalism" (metaphorically) to depict the centrality of the notion (in traditional epistemology) that epistemology is essentially about establishing norms (or necessary and sufficient conditions) for the discovery of knowledge. Rorty describes this task as a *metapractice which will be the critique of all possible forms of social practice* (1979, p. 171). John McDowell and Bouveresse shed more light on how the scope of this "permanent matrix" cuts across all human cognitive pursuits and more importantly how Philosophy derives its authority over other disciplines from it through the notion that philosophical mediation is indispensable in its application. For McDowell:

⁸⁰Allen discusses Rorty's bias in two senses. The first are the biases in the way Rorty chooses to present traditional epistemology. The second are the biases that Rorty shares with traditional epistemology in his pragmatism. He mentioned propositional bias, belief-plus, discursive bias and the misplaced good of knowledge (Allen, 2000, pp. 228-230). Allen also suspects that that Rorty's subscription to anti-realism is at the root of his attempt to replace epistemology (in terms of making others see how a belief is justified) with a non-theoretical "social practice of conversation"(Allen, 2000, p. 226). Allen's contention is that making references to concrete objects and justifying claims about them are indispensable in human conversations and that this fact renders Rorty's anti-realism and anti-epistemology suspect. My contention is that this objection about Rorty's position on realism concerns Rorty's critique of representationalism (metaphysics) more than his identification of foundationalism as the bedrock of epistemology. Consequently, I will consider Rorty's response to this kind of objection in section 4.3.

⁸¹ One prominent link between foundationalism and the idea epistemology is essentially normative, lies in the conception of the role that basic beliefs are expected to play in the justification of beliefs. Foundationalists have argued that justification can neither be endless nor circular. Any evidence presented for a belief in either of these two ways is regarded as untenable. Thus, for foundationalists, the establishment of self-justifying basic beliefs is the most important preoccupation of epistemologists.

What Rorty takes to parallel authoritarian religion is the very idea that in everyday and scientific investigation we submit to standards constituted by the things themselves, the reality that is supposed to be the topic of the investigation. Accepting that idea, Rorty suggests, is casting the world in the role of the non-human Other before which we are to humble ourselves (McDowell, 2000, pp. 109-110).

For McDowell, Rorty thinks that philosophy derives authority from the idea that *answerability to the world is central to the discourse about objectivity and inquiry* (McDowell, 2000, p. 110).

Is Rorty's description of traditional epistemology fair? I think it is. Foundationalists (Chisholm, 1980; Hamlyn, 1970), coherentists (Lehrer, 1974; Rescher, 1974), and contextualists (Annis, 1978; Henderson, 1994), have defended the conception of epistemology as essentially normative. Contemporary epistemologists such as Stroud (1985), Goldman (1993b), Kim (1994) and Kornblith (1994b) all contended that the normative task of epistemology is indispensable. In addition, these philosophers shared Rorty's view that normative task of epistemology is necessitated by the need to refute epistemological scepticism (Rorty, 1979, pp. 6, 46). Consequently, Rorty's equating the replacement of "confrontation" with "conversation" with the rejection of epistemology is a consequence of his rejection of "foundationalism".

4.1.3.2.2 Rorty's two versions of philosophy

Two versions of philosophy are usually contrasted in Rorty's philosophy: Philosophy and philosophy. He uses different phrases to explain what Philosophy stands for: as a means for solving problems (Rorty, 2010, p. 18), a metapractice "which will be the critique of all possible forms of social practice" (1979, p. 171). The second version is vaguely described as "academic philosophy" that tries to "make peace with the literary culture" rather than to "ape the natural sciences". He explains further that this philosophy is built on the notion that "philosophy is not so much a matter of solving problems as of telling a story about the relation between the human past and possible human futures" (Rorty, 2010, pp. 17-18). Rorty's point is that philosophy in this sense is neither concerned with the task of

confronting or refuting sceptics nor with establishing a canon that can provide “a springboard for quasi-scientific research programs” (2010, p. 17).⁸²

Rorty’s critique focuses on Philosophy that is construed as metapractice and problem-solving. He dates its emergence from Cartesian epistemology that makes justification of beliefs and refutation of sceptical doubts the centre of philosophy. Michael Williams agrees with Rorty that epistemology became the foundation of philosophy in two ways. First, because the subject determines the “foundation of knowledge”, epistemology became the most basic division of philosophy because other divisions depend on its results. William describes Rorty’s other reason as richer. For him, Rorty is right that after Kant, the subject we came to know as “epistemology” represents “a new theoretical configuration, without any exact counterpart in antiquity”. Consequently, epistemology “only really comes into its own when promoted to the rank of first philosophy” (Williams, 2000, p. 207).

Several critics have challenged Rorty’s dichotomies between the two versions of philosophy. Susan Haack, for instance, contends that Rorty’s two versions of philosophy lead to an untenable dualism. Haack criticises this view as based on a false dichotomy, most especially how Rorty employs the distinction to categorise Peirce (Haack, 1993b). However, I will not explore these critiques. What I need to establish is that his distinction between Philosophy and philosophy and his argument that epistemology is the foundation of philosophy are not misrepresentations of Rorty’s position. The significance of these claims will be demonstrated when Rorty’s philosophy is compared with Dewey’s.

After outlining several senses in which Rorty’s anti-foundationalism can be interpreted and their possible consequences, in the next sub-section I will discuss three important points that suggest that Dewey is not an anti-foundationalist in the Rortyan sense. Firstly, I consider the argument of Rorty’s critics such as Susan Haack, who argue that Dewey is a foundationalist in a sense that is not

⁸² In one of his responses to his critics, Rorty mentioned two sorts of philosophy professors; those who will like to nudge philosophy over to the side of poetry and those who will like to nudge it over to the side of science (Rorty, 2000c, p. 146).

contradictory with Rorty's identification with Dewey as a non-foundationalist. The last two points concern the consequences Rorty draws out from his rejection of foundationalism which are the adoption of coherentism and the dismissal of traditional epistemology and Philosophy. Consequently, I consider Dewey as a coherentist in the Rortyan sense and how anti-foundationalism in terms of dismissing traditional epistemology and Philosophy is compatible with Dewey's philosophy.

4.1.4 A Critical appraisal of Dewey as an anti-foundationalist; in the Rortyan sense

Susan Haack has made an important contribution to the debate on whether Dewey is a foundationalist. Haack's argument commences from the observation that there are several senses in which the notion "foundationalism" has been used in philosophy. Three senses of "foundationalism" were offered. The first involves theories of epistemic justification: the idea of some "foundational or basic beliefs that are self-justifying and grounding or justifying other non-basic beliefs". This is arguably the most popular version of foundationalism in traditional epistemology. However, given Dewey's contention that new knowledge (or warranted truth) are determined at the end of each inquiry (a notion that implies the possibility of dynamic changes) and given that the notion of "self-justifying beliefs" implies a kind of conceptually fixed notion (before inquiries), Haack was right in saying that Dewey was anti-foundationalist in this sense.⁸³ The second sense of "foundationalism" involves the idea that philosophy provides extra-scientific footing for science. It is arguable that Dewey is also anti-foundationalist in this sense because he sees both science and philosophy as a continuous cognitive enterprise which complement one another. Finally, the third sense of foundationalism is described as some terminal points within specific inquiries. This is because inquiries cannot go on endlessly. However, these terminal points are not absolute and are appropriately described as "contextual foundations" (Haack,

⁸³ It is important to note that, for Dewey, previously established knowledge is a resource for subsequent inquiry. However, for new knowledge to become a resource, it requires new inquiry.

2006, pp. 55-56). Haack's argument is that the fact that Dewey implicitly subscribed to the third sense of foundationalism renders Rorty's depiction of Dewey as an anti-foundationalist incorrect.

However, there is another sense of foundationalism that is not covered in Haack's enumeration. Tom Rockmore called this version "ontological foundationalism" and described it as a strategy for metaphysical realism. In his articulation of this version, epistemological foundationalism ("foundation" in respect of justifying or grounding our beliefs or knowledge claims) is contrasted with ontological foundationalism ("foundation" in respect of how structure of reality determines our theories about reality) (Rockmore, 2004). We have established this view as the most prominent in Dewey's philosophy in chapter two and three, most especially in our contention that Dewey presents metaphysics as the ground-map for epistemology.

We have seen in chapter two how in *Experience and Nature* and *The Quest for Certainty* Dewey traced the origin of "foundationalism" to Greek philosophy exemplified by Plato and Aristotle's metaphysics, against which he offers a trenchant criticism. One significant point concerning Dewey's critique is that he was not arguing for the abolition of "foundations" but rather rejecting "foundations" that are incompatible with the dynamic tenet of evolutionary theory. Consequently, Dewey usually contrasted two notions of "foundations" in his work: the notion of foundationalism that is arrived at through non-empirical methods and the version that is based on empirical or naturalist methodology. A vivid example is found in Dewey's description of reality as "both precarious and stable". I will not repeat the whole argument here. However, I will reiterate his argument portraying existence as "event".

So the traditional view of the static points to something fixed, rigid, incapable of change, and therefore also outside the course of things and consequently non-empirical. Empirically, however, there is a history which is a succession of histories, and in which any event is at once both beginning of one course and close of another; is both transitive and static (J. Dewey, 1925, p. 85).

The word “events” was used in an unprecedented sense; to describe the content of the physical world: mountains, valleys, plants, animals, rivers, and so on. These contents of the physical world are all “events” in the sense that they are dynamic or changing. Since all “events” are characterised by episodes, the components of the physical world such as mountains, valleys and landscapes have histories of how they appear and disappear in successive order. However, some events are more stable or more enduring than others. Without these degrees of “stability” made manifest in objects such as mountains, oceans, valleys, the idea of “precariousness” or “episodic events” made manifest by phenomena such as climate, rainbows, and human psychological dispositions such as joy and happiness, will be meaningless and unfathomable. Without the concept and examples of objects that are stable (to some extent), there won’t be any way to differentiate what is precarious from what is stable. Without some aspects in human transitory states that are more enduring, there won’t be any way to mark where one episode ends and another begins. It is in this sense of limited or temporary stability that some aspects of nature enjoy over others that we can describe them as “foundational”. For Dewey, the metaphor “foundation” describes certain transiting epochs in the history of events. This suggests that he admits some version of “foundation”, in the sense that not everything in the world is completely chaotic or in a state of complete flux. But it must be noted that the periods when these aspects of the world “are” foundational are temporary or contextual.

Three points about these metaphors of “foundation” and “events” are important to prevent confusion. First, they primarily concern existence. The way the metaphor “foundation” was just used is different from the first sense of “foundationalism” mentioned by Haack, which is in respect of our (non-tangible) beliefs. Secondly, this metaphoric use of “foundation” was frequently used in *Experience and Nature* in a specific way to contrast non-naturalist (traditional) metaphysics with a naturalist metaphysics. Thirdly, Dewey rejected “non-naturalist metaphysics because the metaphysicians assumed that there were some entities such as Platonic “Forms” or “Being” or Spinoza’s “Monads” that are described as having features that are permanent or incorrigible. These adjectives

(permanence, incorrigibility) are primarily about the “structures” of some reality and not about the cognizers of the structures.

It is arguable that Dewey’s contention is that there are only contextually stable or “foundational” entities. Dewey’s critique of “ontological” foundationalism is based on the idea that our understanding of the structure or nature of the objects of our knowledge goes a long way towards determining the truth of our epistemological theories about them. More importantly, it is arguable that Dewey was replacing the traditional version of ontological foundationalism (with its permanent notion of foundation) with another version involving contextual foundations. This point corroborates Haack’s argument that Dewey subscribed to the “contextual” sense of foundationalism. The only difference is that while the version that Haack attributed to Dewey is epistemological, my version is ontological.

In *Consequences of Pragmatism*, Rorty seems to notice Dewey’s subscription to this version of episodic “ontological foundationalism”. He claims Dewey was preoccupied with the attempt to present “primary experience” or raw contacts with nature as “the causal antecedents of knowledge”. This is made evident by his preoccupation with attempts to establish “continuities” between the nervous system and people, and between “experience” and “nature” (Rorty, 1982, p. 81). Given that this line of reasoning leads towards commitment to some version of realism, Rorty critiques Dewey’s conception of “primary, non-reflective experience” or more specifically the “role” that he assumed Dewey assigned to it—serving as a foundation or providing justification for “secondary experience”. Rorty argues that what Dewey intended to do *was not to establish knowledge or erect a “foundation” for knowledge* but instead to accept that “we can eliminate epistemological problems by eliminating the assumption that justification must repose on something other than social practices and human needs”. He thought that Dewey inadvertently “ran into this problem” (embracing foundationalism) because he was “side-tracked into doing “metaphysics”” (Rorty, 1982, pp. 81-82). Two questions are pertinent: (i) Did Rorty think Dewey’s “side-tracking” into foundationalism was a genuine mistake or confusion? (ii) Was he suspicious of

Dewey as a surreptitious foundationalist? I think he was only second-guessing Dewey. Dewey's preoccupation with the metaphysics of experience as a strategy to establish an empirical "ontological foundation" for his naturalist epistemology, arguably, is too glaring to be a misrepresentation.

Dewey argues that "primary experience" provides evidential support for "secondary experience". For instance, Dewey says that "the subject-matter of primary experience sets the problems and furnishes the first data of the reflection which constructs the secondary objects is evident. It is obvious that test and verification of the latter is secured by return to things of crude and macroscopic experience..." (J. Dewey, 1925, p. 7). In respect of this non-reflective, primary experience prompting or leading to secondary experience, an ontological "foundation" is implied. And in the "use of things in primary experience" to verify or validate the things in secondary experience, both ontological foundationalism and epistemological foundationalism are embraced.⁸⁴

At this point, it is arguable that Rorty's interpretation of Dewey in terms of unreserved or "radical" subscription to anti-foundationalism is suspect. The argument that Dewey used primary experience as ground or foundation for secondary experience seems plausible.⁸⁵ There is one more point that needs to be made in the light of our contention that Dewey is not a radical anti-foundationalist as suggested by Rorty. Rorty sees his own subscription to anti-foundationalism as a premise to his critique and rejection of metaphysics and his reading of

⁸⁴ We have discussed the "foundational" roles of primary experience for secondary experience in chapters 1 and 2. A problematic human encounter with nature prompts inquiries and the findings of the inquiries are referred to the encounter to determine its validation.

⁸⁵ However, Richard Shusterman argues that Dewey did not present "primary experience" as playing the role of grounding or justifying "secondary experience". He argues that "Dewey effectively denies this by asserting that primitive non-cognitive experience is simply had but not known. And since not even known as "had", it is unavailable for use as evidence to support specific knowledge claims" (Shusterman, 1999, p. 197). While Shusterman was right in his observation, it is arguable that Dewey's emphasis on the grounding role of primary experience is more pronounced. However, Shusterman explored a different motivation for Dewey's "primary experience" that is different from the quest for epistemological foundations as implied in Rorty's critique. Shusterman explored this motivation in terms of an attempt to develop "aesthetic and practical uses of such experience". His general goal in that article is to explore the possibility of "stripping off" the "foundationalist function" ascribed to Dewey's notion of "immediate experience" without losing its point (Shusterman, 1999, pp. 193-219). But the examination of this proposal is not part of the goal of this section.

philosophy (in general) as therapeutic; a mission to which he emphatically asserted that Dewey (and all pragmatists) were disposed.

The ramifications of this problem can be seen in two dimensions. First, If Dewey and Rorty have different notions of foundationalism, it may serve as a pointer to the fact that Rorty does not subscribe to Dewey's version of pragmatism. Secondly, if Rorty's understanding and application of "foundationalism" is radically different from what obtains from any of the classical pragmatists, then, one can argue that Rorty's "neo-pragmatism" is better seen as "post-pragmatism". The foregoing supports Shusterman's contention that post-foundationalist philosophy for Dewey, was neither mere Wittgensteinian therapy to relieve linguistic "cramps and itches", nor a Heideggerian attempt to recapture a pre-Socratic experience of Being but "rather to transfer and apply philosophy's critical acumen and imaginative energy to the resolution of concrete socio-cultural problems" (Shusterman, 1999, p. 193).

4.1.5 An examination of Dewey as a coherentist in the Rortyan sense

Rorty is correct that Dewey emphatically rejected the reading of certainty or fixity into the concept of knowledge. However, it is very hard to think of Dewey as a coherentist in the sense described by Rorty. The reason is that seeing the "structure of our knowledge" as completely "foundation-less", like Neurath's analogy of "a raft floating on the sea", is not compatible with Dewey's theories of nature and knowledge. For instance, from Dewey's claim that "reality" is both stable and precarious, it follows that he acknowledged "foundations", although not eternal, unchangeable, pure and indubitable in either Platonic or Cartesian senses. In Neville's words, "these narrowly stable structures allow us to say metaphysically what change and other obvious characteristics of our world might consist in" (2010, p. 141).

As rightly noted by Manicas, the existence and the acknowledgement of a physical or concrete world is important for the meaningfulness of Dewey's naturalism (2008, p. xiv). Dewey would agree with Rorty that philosophy is all about

conversations and interlocutions, with agreement among language-users playing an important role in inquiries. However, in Dewey's naturalist project, human beings are presented as having a symbiotic relation with nature. There is an apparent cause-effect relationship between reality and our language and beliefs. In this relation, language or conversation is a mere tool and consequently a means to an end. Consequently, there is need for a theory concerning an extra-linguistic world with which propositions, human agreements and conversations are concerned.

Consequently, a theory about how the physical world offers a series of continuous constraints on human beings: prompting inquiries, adaptations, and changes in methodological approach to nature, is a central theme in Dewey. His contention that reality is inherently made up of interchange between precarious and stable events led him to reject the idea of absolute truth. Manicas was right in seeing Rorty's contention that there are "no constraints on inquiry save conversational ones" as un-Deweyan. He identifies this un-Deweyan trend in Rorty as one of the consequences of his (Rorty's) rejection of metaphysics (Manicas, 2008, p. xiv). As noted by Michael Williams, Rorty's denial of any extra-linguistic constraints on inquiry was due to his equating the rejection of foundationalism and representationalism to the end of traditional epistemology on the one hand, and equating the end of traditional epistemology with the end of philosophy on the other hand (Williams, 2000).

With this idea of changeable or corrigible foundations, it is more appropriate to see Dewey's position as similar or closer to D.B Annis' version of contextualism or Susan Haack's version of "found-herentism"⁸⁶, rather than the traditional coherentist theory. Contextualists do acknowledge some foundations that are limited or relative to time, cultures or social contexts. A found-herentist holds that there are foundations that are changeable.⁸⁷ The most important point is that

⁸⁶ Susan Haack combined the "foundation" in foundationalist theories of justification and the notion of "coherence of beliefs" in her book (Haack, 1993a).

⁸⁷ For instance, Haack compares the structure of evidence with the crossword puzzle. The difference between her position and mainstream coherentism is that in relating truth, knowledge or justification to the mutual dependence among our beliefs, we have the empirical world to which

Dewey's ontological thesis about reality is incompatible with a coherentist theory of knowledge. More discussion about the differences between Dewey and Rorty with respect to their theory of reality will be carried out in the later part of this chapter. I turn now to examine the claim that Rorty equates the rejection of foundationalism with the rejection of traditional epistemology, and thus Philosophy.

4.2 Dewey and Rorty's idea of a post-Philosophy culture

How would a Deweyan respond to Rorty's dismissal of epistemology? I think Rorty's bases for this dismissal are unacceptable. In chapter 3, I discussed Dewey's naturalist epistemology and how it is continuous with traditional epistemology but in a clarified way. A vivid example of this continuity is provided by the necessity of admitting some notions of "contextual truths" in Dewey's epistemology. Although Dewey (like Rorty) rejected traditional conceptions of "transcendental" or "absolute truth", he still endorsed a notion of truth ("Truth or falsity" for Dewey, "depends on what men find when they warily perform the experiment of observing reflective events" (J. Dewey, 1925, p. 29)). In chapter three, we have shown how Dewey's instrumentalism provides a fallibilist theory of justification. According to this view, knowledge is a tool and its effectiveness is determined by how its application enhances the re-ordering of the physical world. This point supports the idea that Dewey recognizes the importance of the normative task in epistemology.⁸⁸

to appeal; just as crossword puzzles are solved by a player appealing to different aspects of her experiential evidence (Haack, 1993a). This simply means absence of holistic constraint on relations among beliefs.

⁸⁸ Rorty agrees with Dewey's notions of instrumentalism and experimentalism in several ways. He recommends Dewey's experimentalism at the expense of Plato's attaching human rationality with the ability to "trace our justification back to unquestionable first principles- to "absolutes" (Rorty, 2010, p. 21). He endorses Dewey's practical conception of knowledge rather than theoretical (Rorty, 2000d, p. 217) and Dewey's persuasion concerning abandoning "problems that no longer have practical importance" (Rorty, 2010, p. 22). He agrees with Dewey that languages are "adaptive tools" for reshaping and coping with natural environment (Rorty, 1982, p. xix); one of the most important theses upon which Dewey built his instrumentalist conception of knowledge. Although Rorty warns that we must be careful not to phrase the language/tool analogy in way that could suggest dualism between language and its users (Rorty, 1982, pp. xviii-xix).

Secondly, Rorty envisages a post-Philosophical culture based on his contention that epistemology (which is the foundation of modern philosophy) is untenable. My contention is that his argument that epistemology is the foundation of philosophy renders his position significantly un-Deweyan. In chapter 3, I discussed how metaphysics serves as the foundation for Dewey's epistemology. This renders Rorty's distinction between "philosophy" and "Philosophy" and his presentation of normative epistemology as "first philosophy" suspect.

Finally, I find it very difficult to assimilate Rorty's conception of post-Philosophical culture (in terms of philosophy abandoning the role of arbiter of truth for all human cognitive pursuits or serving as metapractice for all culture) into Dewey's philosophy. Furthermore, the acknowledgement of the importance of this normative task is also reflected in Dewey's conception of the nature of "scepticism" in epistemology. I will reiterate some important points for present purposes. Dewey rejects Cartesian practices of "methodic doubt" on the ground they are "doubts that are not evoked by and are not relative to some existential situation". For this reason he regards them as pathological or idle (J. Dewey, 1968, p. 349; 1991, p. 109). For Dewey, genuine doubts and scepticism can only occur either in respect of questions concerning the "adequacy of the operation used in achieving the issue which transforms a problematic situation into a settled or resolved one" (J. Dewey, 1930, p. 185) or questions relating to the "value of purposes and policies of life" (J. Dewey, 1930, p. 186). Thus, "real" sceptical attitudes and doubts occur in human life when a methodology fails in actuating some desired results, prompting the necessity of being more cautious or careful in subsequent attempts.

In *The Quest for Certainty*, Dewey describes how knowledge is inherently normative and how this normativity confers on epistemology a regulatory role:

What is the bearing of our existential knowledge at any time, the most dependable knowledge afforded by inquiry, upon our judgements and beliefs about the ends and means which are to direct our conduct? What does knowledge indicate about the authoritative guidance of our desires and affections, our plans and policies? Unless knowledge gives some regulation, the only alternative is to fall back upon custom, external pressure and free play of impulse (J. Dewey, 1930, p. 67).

Is Dewey recommending an authoritative or meta-epistemological practice that can lead to the kind of Philosophy that Rorty repudiates? I think he is not. Dewey distinguishes the authoritative or regulatory role proffered for epistemology (because of the normative nature of knowledge) from the kind of Philosophy Rorty hopes to replace when he writes:

When I say “authority” I do not mean a fixed set of doctrines by which we settle mechanically problems as they arise. Such authority is dogmatic, not intellectual. I mean methods congruous with those used in scientific inquiry and adopting their conclusions; methods to be used in directing criticism and in forming the ends and purposes that are acted upon (J. Dewey, 1930, p. 70).

Two points are notable from our discussion. First, Dewey’s conception of epistemology as essentially normative points to the continuity between traditional epistemology and Dewey’s naturalist epistemology. This confirms that Rorty’s neo-pragmatism is different from Dewey’s naturalist epistemology. Second, Dewey’s explanation of how epistemology assumes a regulatory role without developing into “a fixed set of doctrines” by which we can settle all problems, points to the fact that before Rorty’s post-Philosophical culture can take off, it must refute Dewey’s version of epistemology. I now discuss how Dewey’s naturalist metaphysics poses further challenge to Rorty’s position.

4.3 Rorty’s critique of representationalism and his anti-metaphysical position

In this section, I discuss Rorty’s rejection of representationalism in traditional and modern philosophy. Like his critique of foundationalism, Rorty’s critique of representationalism involves both metaphysical theories about the nature of existence and epistemological concerns about theories and methods of knowing. The most important focus, however, is to examine his claim that holding an anti-representationalist position is a necessary condition for pragmatism; a Deweyan version of pragmatism. I argue that Dewey neither shares Rorty’s metaphysical stance nor adopts what appears to be an anti-realist stance in Rorty’s work, even when they both reject representationalism as presented by traditional philosophers.

In *Philosophy and the Mirror of Nature*, Rorty was essentially preoccupied with criticizing traditional conceptions of phenomena such as human mind and language as “mirrors” of nature. The belief that the human mind or language has the “ability” to represent or characteristics that reflect exactly how nature is, is what Rorty pejoratively described as representationalism. I will start the discussion by offering a general sketch concerning some basic ideas on representationalism as presented in traditional philosophy. This sketch is meant to draw attention to the point that while a traditional epistemologist, arguably, will depict the question whether human mind or language can represent nature as a problem of perception, Rorty sees representationalism as an ontological theory that defines the entire history of traditional philosophy.⁸⁹ What then is representationalism? How prominent is the theory in traditional philosophy?

Laurence Bonjour attributes the prominence of representationalism to philosophers’ preoccupation with solving problems of perception such as illusion, hallucination, mirage, and so on. Its fundamental suggestion is that we are not directly aware of objects we perceive (2013). Given these supposed errors in perception, the central question that representationalists are trying to address is “what is it that we are *immediately* or *directly* aware of in sensory or perceptual experience? Is it public physical objects, private sensory entities of some sort, or perhaps some still further sort of entity (or state)?” Consequently, representationalism has been defined as the view “that our immediately experienced sense-data, together with the further beliefs that we arrived at on the basis of them, constitute a representation or depiction of an independent realm of material objects” (Bonjour, 2013). Thus, representationalism involves questions in respect of our perceptual awareness of what exists, the nature of beliefs we formed based on these awareness and how to establish their correspondence (truth) with the external world.

⁸⁹ I will not focus on the views concerning how language can represent nature and Rorty’s critique of them because of lack of space. A chronicle of how traditional, modern, and postmodern philosophers have engaged in what has been described as the “linguistic turn” of representationalism can be found in the work of Dachun and Zengbo (2008, p. 596).

Two phenomena often cited as possible media for representations are human mind and language. The question of how these two approaches fit together has been challenged by critics of representationalism. However, I will focus on Rorty's view about the theory.

Three points are important in Rorty's analysis and critique of "representationalism". The first concerns how he linked "representationalism" with "foundationalism". According to Rorty, "thinking of "rational certainty" as a matter of relation to an object known" makes it reasonable to look toward some "cognitive faculties" for the explanation of the phenomenon (1979, pp. 156-157). The need for a "link" between the "knower" and the "known" will become necessary for the "cognitive relationship" to be possible and comprehensible. It is in this regard that representationalism is theoretically regarded as an offshoot of foundationalism.

The second point concerns how Rorty made a distinction between two trends in the history of the theory of representationalism: the conceptualization of (i) the human mind and (ii) language as a mirror reality. According to him, in the conceptualization of the human mind as a "mirror", the discussion was on the questions whether "material reality is "mind-dependent" or not". However, in the conceptualization of language as a mirror, the focus shifted to "questions about which sorts of true statements if any, stand in representational relations to non-linguistic items" (Rorty, 1991, p. 2).

A further significant point concerns how Rorty contrasts "representationalism" with "anti-representationalism". On this distinction, he writes:

Representationalists typically think that controversies between idealists and realists were, and controversies between skeptics and anti-skeptics are, fruitful and interesting. Anti-representationalists typically think both sets of controversies pointless. They diagnose both as the results of being held captive by a picture, a picture from which we should by now have wriggled free (Rorty, 1991, pp. 2-3).

From this distinction, Rorty sees realists, anti-realists, sceptics and anti-sceptics all as “representationalists”, because they do not subscribe to “the “therapeutic conception of philosophy familiar from Wittgenstein’s *Philosophical Investigations*”, and to “such earlier books as James’ *Pragmatism* and Dewey’s *Reconstruction in Philosophy*” (1991, p. 3). Consequently, instead of seeing “traditional problems of epistemology” (such as refuting sceptics who claim that knowledge is not possible, preoccupation with defining notions of knowledge, truth, objectivity and so on), as pseudo-problems to be dismissed, “representationalists are preoccupied with “systematic” attempts to solve these problems, seeing them as genuine and defining the essence of philosophy (Rorty, 1991, pp. 3-4). It is arguable that this last sense of “representationalism” goes beyond the idea of human mind or human language containing representations or mirroring nature that we have earlier highlighted, to hold that a large percentage of mainstream epistemologists fall under the second category of “representationalists”. From the fore-going, it is arguable that there are two senses of “representationalism” being used interchangeably by Rorty across many of his works and correspondingly two separate objections may be offered.

As an anti-representationalist in the first sense, Rorty argues that we cannot “pick or choose among the contents of our minds or our language and say that this or that item “correspond to” or “represents” the environment in a way that some other item does not” (1991, p. 5). It is in this sense that he rejected the idea that the human mind has the capacity to “mirror” nature. Instead of seeing beliefs or language as representing reality (Rorty, 2000e, p. 5), Rorty sees pragmatists (such as Dewey) as seeing beliefs or language as adaptive tools for re-shaping and coping with natural and social environments (1982, p. xix). One point to be noted about this objection is that the supposed cognitive capacity of the human mind to mirror the world and the supposed semantic structures in language that engenders linguistic representation are both denied. As an anti-representationalist in the second sense, Rorty sees himself (and others he identified as subscribers to this view) as holding a therapeutic stance that the supposed traditional problems of philosophy are pseudo-problems and consequently should be dismissed.

How do we assess these two objections? Brandom interprets Rorty's objection to the first sense of representationalism in a way that illuminates Rorty's strategy and intention. He concentrates on Rorty's "analysis" of the supposed features of mind such as "in corrigibility" upon which representationalists frequently reacted.

Brandom writes:

Rorty construed incorrigibility in normative terms as a structure of authority, as according some representations a distinctive sort of epistemic privilege. And he went on to understand this special sort of normative status in social terms: we treat sincere first-person claims about the contemporaneous contents of consciousness as incorrigible by agreeing to count nothing as overriding them, that is, as providing decisive evidence against them. ... If, as Rorty further argued, it is coherent to conceive of circumstances in which we alter our vocabulary to allow sincere first-person reports of mental happenings to be overruled, say by the deliverances of cerebroscopes, then by doing so we are conceiving of circumstances in which we would have come not to have minds in the specifically Cartesian sense. Since this process need not affect our capacity to deploy the vocabulary of psychological states about which no-one these days takes us to be incorrigible- beliefs, desires, intentions, and so on – to envisage the loss of mind in this sense need not have impact on our sense of ourselves as intelligent or rational, that is as sapient (Brandom, 2000, pp. 157-158).

According to Brandom, Rorty's target "is the philosophical invocations of representations supposed to be epistemically privileged solely by their relations to certain kinds of things- perceptible facts and meanings- apart from the role those things played in practices of acknowledging them as authoritative" (2000, p. 159). However, he objected to this strategy because it addresses only one of the two issues that are involved in the representationalist account of mind. Rorty argues against "epistemically privileged access" often attributed to the human mind and ignores the role of the mind in the determination of what access is privileged.⁹⁰

Another argument that I will be exploring later in this chapter concerns the distinctiveness of these two senses of representationalism which arguably, Rorty *conflates with one another*. More importantly, following Brandom's contention that epistemic descriptions of the human mind are different from ontological

⁹⁰ It is more of social determination for Brandom (Brandom, 2000).

descriptions, I will argue that commitment to the first sense of Rorty's representationalism does not imply any commitment to the second sense. While the first sense is arguably the standard or traditional version of representationalism, it is arguable that the second version became the central focus of Rorty's neo-pragmatism. He frequently presents it as one of the consequences of pragmatism. However, it is arguable that Rorty keeps on changing the borderlines between these two ideas of representationalism. This unclear distinction becomes worrisome most especially when it serves as the basis for his other closely-related distinctions such as between systematic philosophers and edifying philosophers on one hand and between normal philosophers and revolutionary philosophers, on the other hand (Rorty, 1979, pp. 365-379).⁹¹

I summarise what Rorty regarded as consequences of holding anti-foundationalism and anti-representationalism: (i) denial of truth that is independent of or transcends the human condition (ii) denial that that knowledge represents reality and that certainty is one of the hall-marks of knowledge (iii) denial of the notion of objectivity, as traditionally conceived to mean human-independent perspective and the denial that "reality" is monolithic with one perspective or one privileged access.

4.3.1 A Critical appraisal of Dewey as an anti-representationalist in Rorty's sense

Rorty seems to be correct in grouping Dewey as an anti-representationalist in the first sense. The way in which Dewey rejected Kant's conception of the cognitive capacity or functions of human mind together with his (Dewey's) conception of

⁹¹ Rorty thought he could carve out "a tradition" from philosophers who subscribed to the "therapeutic stance" and contrast them with mainstream philosophers. In his "Intellectual Autobiography", he admitted the futility of this mission when he writes that "I wrote the distinction when "I was just beginning to get acquainted with the line of thought that leads from Hegel through Kierkegaard and Nietzsche to Heidegger and Derrida. In his "Response to Michael Williams", he made similar admittance of failure in the attempt to dissolve "certain very particular problems which were being discussed by analytic philosophers in the 1970's (Rorty, 2000d). In the subsequent section of this chapter, I shall argue in the subsequent section that philosophers such as Dewey take the "therapeutic stance" only on a limited number of problematic issues and consequently cannot be described as totally dismissive of Philosophy.

language as “adaptive tools” seem to corroborate Rorty’s claim.⁹² For instance, Dewey rejected Kant’s statement that “we have in our mind” schema of things that are “monogram of a priori pure imagination through which alone images are formed” (Kant, 1963, pp. 118-119) on the ground that it explains the cognitive capacities of human mind as a phenomenon with magical powers (J. Dewey, 1925, pp. 64, 133). Alternatively, Dewey argues that “mind” is existentially an adverb and not a noun. He explains the adverbial nature of “mind” in terms of “disposition to activity” (1925, p. 132). For him, “thought”, “reason” and “intelligence” are *the generic traits of human mind without which the nature of human mind cannot be known* (1925, p. 172). He writes:

Natural events are so complex and varied that there is nothing surprising in their possession of different characterizations, characters so different that they can be easily treated as opposites... That to which both mind and matter belong is the complex of events that constitute nature. This becomes a mysterious tertium quid, incapable of designation, only when mind and matter are taken to be static structures instead of functional characters (J. Dewey, 1925, p. 64).

The suggestion from this passage is that Dewey’s conception of knowledge (and reality) as dynamic is incompatible with the notion of mind having power to mirror nature for two reasons. For human mind to mirror nature, it requires permanence and one-to-one correspondence in the relationship between the two phenomena. In his analysis of the human mind, the traditional conception of mind that is contrasted with the human body is rejected. The idea that human mind can mirror nature is rejected in Dewey’s instrumental conception of the human mind. However, one point to note is that the quest to know or account for how the human mind works is evident in the alternative account provided by Dewey.⁹³

⁹² Again, I will not go deeper into Dewey’s theory of language. I will only make references to it in passing.

⁹³ In addition, Dewey’s analysis of language in terms of “tool of tools”, arguably forecloses any attempt to see language as having any representative capacity. According to him, “Language is always a form of action and in its instrumental use is always a means of concerted action for an end, while at the same time it finds in itself all the goods of its possible consequences” (J. Dewey, 1925, p. 152). Dewey’s point is that language is our means of converting thinking into a social medium. It is a way of sharing our world with other people. In addition, language is an instrument for concerted social actions. Language is *a tool of tools*. This conception of language is a rejection of the “representative” approach to language perhaps most profoundly expressed in the early Wittgenstein’s Tractatus according to him, “A proposition presents the existence and non-

As rightly noted by Haack (2006, p. 55) and Shusterman (1999, p. 195), Dewey's conception of mind is a consequence of his critique of mind/body dualism and its attendant Spectator Theory.⁹⁴ The Spectator Theory depicts mind as having the cognitive ability to represent (or "mirror" the world in Rorty's term) the world independently of the material body in an objective way; free from sensory errors. Dewey rejects both dualism and the Spectator Theory because they alienate human beings from nature. Shusterman puts Dewey's conception of mind succinctly as "mind is not an outside observer of the natural world but an emergent part of it (1999, p. 195). The rejection of this theory of mind and language in Dewey's philosophy matches the first sense of Rorty's anti-representationalism highlighted above.

What about the second sense of representationalism in which Rorty arguably equates anti-representationalism with holding a "therapeutical stance"? Once again, Haack provides a good guide. Her argument is that to understand the differences between Rorty and Dewey on "representationalism", one needs to identify the different motives behind their rejection of the theory. For Haack, Dewey's critique of mind/body dualism, the Spectator Theory and his attempt to "get away from the representative theory of perception" was to "improve on the idea of truth as correspondence or copying", by acknowledging that "we are not passive receivers but active inquirers" (Haack, 2006, p. 55). Dewey's target, according to Haack, was to demonstrate how "purposive success, might replace accuracy of representation as the criterion of well-conducted inquiry". In this sense, Haack's contention is that in those instances where Dewey appeared to be holding a therapeutical stance (for instance on mind/body problem, consciousness, and natural ends), he was only rejecting the ways the problems were traditionally formulated and the solutions proffered to them.

existence of atomic facts" and "The totality of true propositions is the total natural science (or the totality of the natural sciences)" (Wittgenstein, 1922, pp. 4.I, 4.II).

⁹⁴ Dewey describes the Spectator Theory as the belief that "what is known is antecedent to the mental act of observation and inquiry, and is totally unaffected by these acts" (J. Dewey, 1988, p. 19). We have discussed his presentation and critique of this view in chapter 3.

Haack argues that for every such engagement where Dewey challenged previous positions or theories, he always provided radical new theories in lieu of the rejected ones. Dewey developed a naturalist theorist of mind, ends, and consciousness. In addition, Haack contrasts Rorty's attempt to repudiate epistemology itself as a discipline with Dewey's critique of the Spectator Theory or representationalism and concludes that Dewey cannot be described as repudiating epistemology nor offering a therapeutic stance (Haack, 2006, p. 55). I now explore Rorty's view concerning Dewey's metaphysics, specifically, his claim that understanding Dewey in a therapeutical sense shows why nobody needs a metaphysics (Rorty, 1982).

4.3.2 Anti- metaphysical arguments in Rorty's neo-pragmatism and their incompatibility with Dewey's philosophy

In this section, I explore the argument that Rorty's denial of metaphysics is at the root of his anti-representationalist stance. More importantly, I discuss how Rorty thinks that rejecting metaphysics is necessary for "pragmatism" and "naturalism" (Rorty, 2000e). However, the most important focus in this section is to examine Rorty's claim that his position is like Dewey's; that the idea of being a pragmatist and a naturalist without needing a metaphysics, is implicitly contained in Dewey's work. I start the discussion by sketching Rorty's idea of a metaphysics. I then discuss two approaches to metaphysics that he identifies in his work: the constructivist and the therapeutical stances. I then discuss his argument that, although Dewey wavers between the two stances, he is better read as holding a therapeutical stance. I challenge this claim by arguing that a therapeutical stance cannot be used to describe the entire framework of Dewey's metaphysics.

What is a metaphysics, according to Rorty? Again, no straightforward definition can be provided. However, there is no doubt that he sees metaphysics as invariably involving questions about nature, which is indicated in his reference to some works as paradigms of metaphysics: the central books of Aristotle's

Metaphysics and Spinoza's Ethics (Rorty, 1982, p. 72).⁹⁵ For present purposes, I concentrate mainly on two significant aspects of his notion of metaphysics: (i) how Rorty presents the traditional conception of metaphysics as a rival to science (Rorty, 1982, pp. 37, 77) or as a branch of philosophy that needs to justify its existence before the sciences (Rorty, 1982, pp. 38-39) and (ii) how he makes distinctions between what he calls therapeutical and "constructivist" approaches to metaphysical questions or problems.

According to Rorty, the early works of philosophers such as Wittgenstein, Heidegger, and Dewey were "constructive". By this, he meant that they were initially preoccupied with attempts to construct one theory or the other based on the conviction that philosophical problems were genuine. He argued that they all abandoned this "constructivist" stance in their mature works when they realised the futility of their efforts. For Rorty, these philosophers moved from "constructive" preoccupations to "therapeutic" when they "broke free of the Kantian conception of philosophy as foundational" (1979, p. 5). Rorty believed that their endorsement of a therapeutical stance was conditioned by failure to achieve anything that is theoretically substantive. However, he contends that even though in Dewey's mature works, he still wavers between the traditional stance and the therapeutical stance, he is better read as a subscriber to the latter (Rorty, 1991, p. 3).⁹⁶ Rorty noted that Wittgenstein, Heidegger, and Dewey "are in agreement that the notion of knowledge as accurate representation, made possible by special mental processes, and intelligible through a general theory of representation, needs to be abandoned" (1979, p. 6). However, Rorty seems to see this quest to abandon tradition as pervading the entire preoccupations of these three philosophers when he writes:

⁹⁵ However, we can go deeper by pointing to references concerning idealist metaphysics, empiricist or materialist metaphysics (Rorty, 1982, p. 42) and Christian metaphysics in his numerous works; to indicate his acknowledgement of the distinctions between transcendental and non-transcendental metaphysics in traditional metaphysics.

⁹⁶ In *Truth and Progress*, Rorty argued that although Dewey was preoccupied with telling philosophers "what problems not to discuss", the fact that he still asked some questions that were formulated in earlier times, makes him to waver in his therapeutic stance (Rorty, 1998, pp. 5-6).

They set aside epistemology and metaphysics as possible disciplines. I say “set aside” rather than “argue against” because their attitude toward the traditional problematic is like the attitude of the seventeenth-century philosophers toward the scholastic problem. They do not devote themselves to discovering false propositions or bad arguments in the works of their predecessors (though they occasionally do that too). Rather, they glimpse the possibility of a form of intellectual life in which the vocabulary of philosophical reflection inherited from the seventeenth-century would seem as pointless as the thirteenth-century philosophical vocabulary had seemed to the Enlightenment (Rorty, 1979, p. 6).

What makes the positions of these philosophers therapeutical is that *they set aside traditional theories in epistemology and metaphysics without offering alternative theories* (Rorty, 1979, p. 6). A subscriber to the therapeutical stance, like Wittgenstein, will be preoccupied with attempts to convince fellow philosophers that they are engaging with pseudo problems that cannot be solved because misuse of language creates them. Consequently, Rorty reads Dewey as suggesting that traditional concerns such as attempting to refute the sceptics, differentiating between a believer and a knower or between truth and error, between objectivity and subjectivity, should be abandoned. Rorty’s reading of Dewey on these positions as “therapeutical” is correct.

Moreover, there are arguably many arguments in Dewey’s work that justify Rorty’s reading of his position as therapeutical. In *Experience and Nature*, for instance, Dewey recommended that some classical Aristotelian metaphysical theories such as his “theory of natural ends” be treated as “the Jonah of science” and be “thrown bodily overboard”. His reason for dismissing this form of inquiry is that it contradicts some principles in astronomy and physics (J. Dewey, 1925, p. 112). Dewey also rejected any form of metaphysics that is presented as “a rival instead of a complement to the sciences” (J. Dewey, 1929, p. 309). Dewey was typically against any form of metaphysics that employs non-empirical methodologies because it “denatures” natural phenomena. Dewey usually referred to this kind of metaphysics as non-natural or transcendental philosophy (J. Dewey, 1925, pp. 1-36). However, Rorty seems to be pushing Dewey from a position we can describe as a “selective therapeutical stance” to a radical or total therapeutical stance. More importantly, he seems to move from interpreting Dewey as having a

therapeutical stance to interpreting his position as generally indicating an anti-metaphysical stance, rather than seeing Dewey as being against a version of metaphysics. But Dewey is not against the kind of metaphysics that employs empirical methodology and more importantly that embraces his version of naturalism.

Take for instance one passage in Dewey's work that Rorty interpreted as containing a recommendation for a "general" therapeutical approach to philosophical problems (Rorty, 1982, p. 73). Dewey writes:

This is the extent and method of my "metaphysics":- the large and constant features of human sufferings, enjoyments, trials, failures and success together with the institutions of art, science, technology, politics, and religion which mark them, communicate genuine features of the world within which man lives. The method differs no whit from that of any investigator who, by making certain observations and experiments, and by utilizing the existing body of ideas available for calculation and interpretation, concludes that he really succeeds in finding out something about some limited aspects of nature (J. Dewey, 1927, p. 59).

Interpreting this passage, Rorty writes:

In this passage, Dewey wants to say simultaneously "I am just clearing away the dead wood of the philosophical tradition" and "I am using my own powerful invention-the application of scientific and empirical method in philosophy-to do so" (Rorty, 1982, p. 73).

While Rorty argued that this passage from Dewey points to an instance where Dewey wanted traditional questions of metaphysics to be abandoned, it is arguable that he was wrong. Dewey's passage claims that there is a "world" in which human being is an integral part. Human beings are part of the world because their "traits of existence": sufferings, enjoyment, and the institutions emanating from them "communicate genuine features of the world within which man lives" This is one of the most fundamental claims that defines Dewey's naturalism. In addition, the importance of empirical investigations, experimentation, and the employment of scientific paradigms in inquiries are acknowledged. It follows therefore that any metaphysics that embraces these features is a naturalist metaphysics that Dewey endorsed. Consequently, he defines his version of metaphysics as "the nature of the existential world in which we live" (J. Dewey,

1925, p. 41) and the “cognizance of the generic traits of existence” (J. Dewey, 1925, p. 46) .

Dewey was very particular about the empirical methodology he was recommending, which he called “denotative methodology”. For him, while the subject matters of the naturalist metaphysics are not novel but continuous with traditional metaphysics in a transformed way, the methodology is new. For instance, like traditional metaphysicians, the naturalist metaphysician is keenly interested in knowing subject-matters of metaphysics such as the nature of mind and body and the relationship between them. However, while the former treated the two phenomena as distinct and separate and ended up with the idea of “mind” as a disembodied existence, the naturalist metaphysician rejects this “dualistic metaphysics” and its corresponding “idealistic ontologies” and treats “mind”, “thought”, and “reflection” as “adjectives” for describing some “natural events occurring within nature”. The recognition of “mind” as substance is replaced with the idea that “reflections” are responses to natural events and are associated with empirically observable traits (J. Dewey, 1925, p. 59). Scientists and metaphysicians have similar interests but different methodological approaches. This means some of the questions previously engaged with are still regarded as relevant and worth pursuing. In addition, given that scientists and that the naturalist metaphysicians have nature or “experienced material” as their subject-matter, there is no rivalry between the ontological account of a naturalist metaphysician and a scientist (J. Dewey, 1925, pp. 2,7,123).

Dewey argues that the consistent use of empirical methodology in a naturalist metaphysics differentiates it from traditional metaphysics in which the use of non-empirical methods (such as conceptual analysis and the use of intuition) are indispensable. The thrust of his contention is that the “transformation” of the subject-matters of the traditional metaphysics depends on diligent application of this novel empirical method. This method shares several features with the methods common among the natural sciences: empirical investigation, repeated and repeatable tests, and the use of laboratory instruments. However, there is one element about Dewey’s method that is unique. It requires that “things must be

studied as they are experienced” (J. Dewey, 1925, p. 4). It follows that those issues such as questions about morality, esthetics, arts, and magic, must be studied as they are experienced. The target of this method is to “discover some of the general features of experienced things and to interpret their significance for a philosophical theory of the universe in which we live” (J. Dewey, 1925, p. 5).

Three points are notable about this methodology: (i) it is closely linked with Dewey’s naturalism (ii) it engenders a complementarity between naturalist metaphysics and science, and most importantly (iii) its application renders issues usually regarded as “unscientific” legitimate scientific issues. While Rorty argues that Dewey was using the “new method” to “clear away the dead wood of philosophical tradition” (Rorty, 1982, p. 73), it is arguable that Dewey was explaining how his approach engenders a naturalistic but not scientific metaphysics. This is how the method allows him to continue metaphysics, expand its scope, and connect it with science without replacing it with science.⁹⁷

It is apparent that Dewey’s claim that understanding *that experience is of as well as in nature*, is indispensable in the formation of a theory of nature (J. Dewey, 1925, pp. 2, 4), is one of the most fundamental points that define his naturalism and metaphysics. Philosophers such as Boisvert see the importance of Dewey’s naturalism as lying in the project of “situating humans within a natural context” (Boisvert, 2010, p. 562). However, I have explored in chapter three the point that his claims on the subject-matter of experience draw exclusively from his discussion of “generic traits of existence”. The point that needs to be emphasised is that both issues are metaphysical issues. Neville was right when he argued that a pragmatic metaphysics emerged from Dewey’s preoccupation with “generic traits of existence” (2010, pp. 140-144). Both Boisvert and Neville contend that Rorty failed to acknowledge the “metaphysical nature” of these issues and consequently missed their significance within Dewey’s naturalism.

⁹⁷ Sleeper succinctly put this point when he writes: “For though there is a sense in which Dewey is always considering what science can tell us, he is not trying to put scientific method in the place once occupied by classical metaphysics and epistemology. He is not trying to overcome tradition, but rather to transform it” (Sleeper, 1986, p. 7).

In the next section, I discuss the distinction between realism and anti-realism in Rorty's neo-pragmatism and argue that this discussion shed further light on the differences between Dewey and Rorty's position on metaphysics.

4.4 Ontological commitment in Rorty's neo-pragmatism and its implications for understanding Dewey's philosophy

In this section, I consider some ontological commitments that are either directly declared by Rorty or are often attributed to him by his critics and allies; as consequences or implications of his contentions. While these attempts to pin Rorty down to either a realist or an antirealist position may be contentious, it is a task that is important for making his perspectives clear, most especially the Deweyan in him. This task is guided by the thought that some form of commitment to an empirical ontology is unavoidable in any Deweyan theory of knowledge.

One of the controversies often associated with Rorty's neo-pragmatism is that some of his views really espouse anti-realism. What seems to make Rorty's supposed denial of reality very interesting is how he associated it with the denial of positions such as foundationalism and representationalism, and how he associates the position with pragmatism. But did Rorty subscribe to anti-realism?

Perhaps the strongest evidence that Rorty is an anti-realist is found in one of his characterizations of pragmatism:

Let me sum up by offering a third and final characterization of pragmatism: it is the doctrine that there are no constraints on inquiry save conversational ones - no wholesale constraints derived from the nature of the objects, or the mind, or of language, but only those retail constraints provided by the remarks of our fellow-inquirers... The pragmatist tells us that it is useless to hope that objects will constrain us to believe the truth about them, only if they are approached with an unclouded mental eye, or a rigorous method, or a perspicuous language (Rorty, 1982, p. 165).

Again, he writes,

As I see it, the whole point of pragmatism is to insist that we human beings are answerable only to one another. We are answerable only to those who answer to us

– only to conversation partners. We are not responsible either to the atoms or to God, at least not until they start conversing with us.⁹⁸

The impression created in holding these views is that, if there is reality out there, they do not affect us and consequently need not be referred to in our metaphysical theories. Rorty's major premise for his claim that there are no non-linguistic constraints on inquiry and our theories is that pragmatists believe that there is nothing inherent in objects (nature) that could determine the truth regarding the state of affairs in nature or there is nothing in nature that could actuate our theorizing or serve as a guide or set a limit to our conversation about nature. This will be a strong premise for denying metaphysics.

Putnam, for instance, noted Rorty's admission that science is to be seen "as a set of working diagrams for coping with nature" and that "using vocables" (the words and sentences of 'our language') "is as direct as contact with reality can get" are reassurances that he is not denying that there is a world. However, Putnam's challenge is that these reassurances are inadequate (2000, p. 81).

Putnam argues that Rorty's account of reality can be compared with the positivists' phenomenalist "construction of the world" and consequently faces the same problems. According to Putnam, the positivists believed that everything we refer to as "real" is a "logical construction out of sense-data" but they are faced with questions concerning how to explain the apparent dissimilarities between "sense data" (for instance, a spouse's "empirical" and phenomenalist' account of her partner) that have "only contingent relations with the person performing the phenomenalist construction of the world" and "entities" (for instance, the husband or partner of the spouse) in our ordinary language that arguably have more enduring characteristics (Putnam, 2000, pp. 81-82). Putnam argues that Rorty faces the same problem about how to account for the "relation" between what he called "vocables" (our utterances) and what the "vocables" are all about (reality). Analysing Rorty's explanation of this "relation" Putnam writes:

⁹⁸ This quotation credited to Rorty was cited by Stout Jeffrey (2007, p. 9).

On Rorty's view, we have a variety of language games; the use of words in a language game is determined by what Rorty sometimes refers to as "algorithms" or "programs". The inputs to these programs are themselves, Rorty says, always "tailored to the needs of a particular input-output function, a particular convention of representation", and the output are ways of coping (kicking back), ranging from technological strategies to emotional, aesthetic, even spiritual attitudes. Insofar as I do something that can be called "describing reality" at all, the description is the whole system of vocables I *produce*. *But no word in that system of vocable is has a determinate correspondence to a particular set of "discrete hunks of reality...* (Putnam, 2000, p. 83).

Putnam's point is that the feature common to both positivist and Rorty's accounts of reality is that there are certain realistic sounding statements in ordinary language that are being treated as trivial. Putnam thinks that while Rorty is claiming to be an anti-realist, his choice of words in describing the use of language such as "ways of coping" or "kicking back" betrays an implicit notion of a relationship between the use of "language-game" (or vocables) and an extra-linguistic "reality". The fact that Rorty needs "to cope" with "something" is a pointer to an extra-linguistic reality that is capable of constraining inquiries and conversations. Rorty responded that he was not presenting an account of language meant to acknowledge or preserve references to extra-linguistic phenomena in our ordinary language (common sense realism). He argues further that "common sense realism" usually leads to metaphysical realism; the view that there is reality that exists independently of human thought, conceptions and language (Rorty, 2000b, pp. 88-89)⁹⁹.

However, Brandom cautioned that seeing Rorty's denial of "non-linguistic constraints on conversations" as a pointer to an anti-realist position could amount to a straw man argument. His point is that Rorty's statements should not be taken as they appeared and that Rorty was not overemphasizing plasticity. Brandom

⁹⁹ The thrust of Rorty's response to Putnam's challenge is that his account (of language) was given "for philosophy-of-language purposes, just as the sense-data account was once given for epistemological purposes" (Rorty, 2000b, pp. 88-89). It is arguable that this suggests a kind of theory of language that is cut off from ordinary common-sensical use of language. Rorty's further argument that we can co-switch between different contexts of language users (the learned and the ordinary) seems to strengthen further this elitist theory of language. However, it is arguable that Rorty evaded Putnam's question about how to account for the apparent references to extra-linguistic phenomena in our ordinary language.

compares Rorty's strategy in *Philosophy and the Mirror of Nature* with the strategy Kant used against his predecessors, making a distinction between causal considerations and justificatory considerations:

Rorty appeals to this Kantian distinction to enforce a strict separation between the foreign and domestic affairs of vocabularies. Under the banner "Only a belief can justify another belief" - epitomizing a view he shares with Sellars and Davidson- Rorty insists that inferential or justificatory relations obtain only between items within a vocabulary (that is, between different applications of a vocabulary). The relations between applications of a vocabulary and the environing world of things that are not applications of a vocabulary must be understood exclusively in nonnormative causal terms. The application of any empirical vocabulary is indeed constrained by the world in which it occurs, but that constraint should be understood as a kind of causal constraint, not a kind of normative constraint [Brandom, 2000, p. 160].

From this reappraisal of Rorty's position, it appears that the contention that Rorty denies reality significantly loses its bite. It offers a strong argument for the claim that the contention arose because of a category mistake: confusing causal considerations with justificatory considerations. It is a category mistake to hold claims as standing in normative relations to facts, because "normative relations are exclusively intravocabulary" while "extravocabulary relations are exclusively causal". Rather than interpreting Rorty as arguing that only vocabularies exist, Brandom argues further that, "to talk of facts is to talk of something that is conceptually structured, propositionally contentful" and this is *a consequence of his (Rorty's) anti-idealist commitments to the world of causally interacting things that causally constrains our applications of vocabulary not having a conceptual structure* [Brandom, 2000, p. 161].

How do we appraise this argument? Firstly, Brandom expects Rorty's allies and critics to understand his (Rorty's) denial of extra-linguistic constraints on inquiry, exclusively from the purview of his (Rorty's) rejection of traditional theory of justification. This is specifically the rejection of justification in terms of subjects (as a claimant) standing in certain relations to objects or claims being justified in terms of a correspondence relation with facts. This is a theory of justification that Rorty identifies as embedded in the interwoven theses of foundationalism and representationalism. For him, "facts" cannot justify our beliefs because facts are

not to be regarded as concrete reality in the manner the traditionalists have construed it but rather are our conceptualizations about reality. Consequently, the idea of seeing concrete realities in terms of facts, capable of determining the correctness or incorrectness of our claims, is a subscription to idealism. On this point, as noted by Brandom, Rorty's argument is valid.

However, the way we relate with objects in the world is not only in terms of the need to justify our claims. For instance, we describe them as they appear to us: shapes, colours, weight and other descriptions that philosophers have categorised either as primary or secondary qualities. More importantly, in Dewey's terms, *they are things had before cognised or theorised*. Again, as noted by Dewey, this "non-cognitive" relationship with the world is what makes one form of ontological commitment or the other imperative for us. Rorty's critics can go along with his contention that we don't need to be a realist (or an anti-realist) when we need to determine, for instance, what it means when we are confronted with a signboard stating either that "This road is closed" or "This bathroom is under construction". Merely seeing these inscriptions is enough for us to modify our actions. But his critics are not ready to extend this agreement to the claim that references to reality are not needed when the truths about the structures, locations, and conditions of certain "bathrooms" and "roads" referred to in those inscriptions are to be determined. Any form of answer to this question seems to put a demand on Rorty to be a realist or otherwise.¹⁰⁰

Are we being unfair to Rorty? In chapter one, we arrived at a conclusion that Dewey's position on ontology is neither realist nor anti-realist because it renders obsolete the traditional lines usually drawn between the two theories. This is because his position contextually contained some aspects of both theories. If Rorty's position matches this characteristic, won't it point towards Rorty being a Deweyan rather than being a problem?

¹⁰⁰ This claim at first glance seems to be a false dilemma because Rorty may opt for quietism. Yet, Jeffrey Stout notes Rorty's rejection of a "wholesale quietistic impulse" (Stout, 2007, p. 12). I will not go into this debate in this work.

For Dewey, our conversation or theories about nature can neither start in a vacuum nor progress (nor terminate) without decisive constraints arising from human environment-organism transaction. Man-nature transaction, according to him, is a symbiotic relation. From his fundamental ontological position that reality is inherently both precarious and stable, Dewey arguably developed a position that rightly can be described as pluralist but realist. He is a pluralist because he argues that both the precarious and stable aspects of reality are legitimately real and are to be treated as they are, without the precarious aspects being denied based on the stability of the other aspects (J. Dewey, 1925, pp. 37-66). He regarded any attempt to convert the precarious aspect of reality into what is stable or attempt to relegate “the unstable, and unfinished to an invidious state of unreal being” while “the assured and complete” is exalted to the rank of “true Being” as the *philosophic fallacy* (J. Dewey, 1925, p. 47).

Dewey’s broader argument is that these traits of precariousness and stability *permeate every form of existence*. He is a realist because he contends that the precarious and stable aspects of reality provide an *indivisible* objective reality (J. Dewey, 1925, p. 43). More importantly, he emphatically argued that nature determines or actuates our deliberations about nature. Challenges from nature, according to him, actuate our desire to know more about nature in order to cope with nature. Consequently, Dewey has an ontological account showing how the constituents of the world interact with one another. The account of these symbiotic interactions marks the starting point of his naturalistic epistemology where human beings, by the conditions of their transactional relations with the world, must keep on adapting to changing situations and reconstructing parts of the world to enable their survival. This is what Dewey called a “Reality”- a phenomenon which is presumed to be “more comprehensive, fundamental, and ultimate than the knowledge which can be provided by the organs and methods at the disposal of the “special” sciences” (J. Dewey, 1968, p. 5).

However, Dewey has been regarded as an anti-realist by some scholars. Reichenbach, for instance, regarded Dewey as an antirealist because he thought that Dewey’s reference to *objects of science as instruments, constructions or*

relations of "qualitative" objects indicated the denial of their objective reality (1939, p. 164). Generally, Dewey's conception of reality as an *unfinished and evolving process* has been regarded by some scholars as an anti-realist point of view because reality should not be regarded as dependent on human creativity. In chapters 2 and 3, I have explored these two positions in Dewey's naturalist philosophy: (i) that Dewey's claim that "scientific objects" are instruments arguably appears to be a constructivist or an anti-realist stance and (ii) that Dewey's admission that reality is both stable and precarious is a realist stance. I have also explored two possible ways of defending Dewey against anti-realist charges: (i) that the appearance of both realist and anti-realist stances in Dewey's philosophy is a pointer to the fact that the realism/antirealism distinctions do not apply to Dewey. Sleeper gives a good account of this argument. For him, to understand the apparent subscriptions to both realist and antirealist tenets in Dewey's philosophy, one needs to note that he was engaging in the "reconstruction of realism as he had previously been in the reconstruction of idealism" (Sleeper, 1986, p. 7)¹⁰¹ and (ii) that Dewey is better understood as being a realist in his metaphysical theory and an anti-realist in his epistemological theory. He is an anti-realist (epistemologically) because he denies one-on-one correspondence between human knowledge and reality. It is in this sense that Dewey's philosophy contains both realism and anti-realism without involving contradiction.

However, Rorty seems to be making no attempt to deny being an anti-realist. Rorty argues that "pragmatists do not employ expressions like "ontological status" (Rorty & Engel, 2005, p. 32). Dewey on the other hand, as rightly noted by Sleeper, "approaches metaphysics through ontology- that is, by means of existences as qualitatively individual" (Sleeper, 1986, p. 132). This significant difference provides

¹⁰¹ Sleeper argued that one needs to understand "the process of growth" from Dewey's early work to the "mature work" (1986, pp. 62-63) and the corresponding transformation from idealism to radical (empiricist) ontology (Sleeper, 1986, p. 63) and radical realism (Sleeper, 1986, pp. 3,13, 63). Buttressing this point, Sleeper contrasts two versions of realism that were identified in Dewey's work; the "functional realism" which in his argument is an extreme realist position that Randal and Woodbridge ascribed to Dewey and "structural realism" which he argues to be a modest and more appropriate Deweyan position (Sleeper, 1986, p. 132). Exploring these versions of realism in Dewey is beyond the scope of this section.

strong evidence for the claim that Rorty's neo-pragmatism is significantly different from Dewey's philosophy. One notable point about Rorty's anti-realism is that he rejected common sense realism in our ordinary language as a way of preventing philosophers from "succumbing to the urge of metaphysical realism". Consequently, his anti-realism (and theories of justification and language) depends on his view about metaphysics. I now turn to examine the differences in Dewey's and Rorty's views on metaphysics through their subscriptions to naturalism.

4.5 Rorty's critique of naturalism: Deweyan and non-Deweyan versions

I start the discussion by noting the difficulty concerning any attempt to identify Rorty with any of the versions of naturalism such as metaphysical, ontological, and methodological versions considered in chapter one. Consequently, I did not attempt to state, categorically, Rorty's definition of naturalism. Rather, I articulate his position on naturalism by discussing some versions or some aspects of some versions of naturalism that Rorty seems to endorse

Although a critical examination of Rorty's critique of naturalism should contrast his views with all possible versions of naturalism, I did not attempt that here. However, instances where Rorty commended and critiqued Dewey's naturalism will be regarded as providing the best source for articulating Rorty's naturalism. Consequently, I discuss some aspects of Dewey's and Rorty's philosophy that suggests that the two share similar naturalist views such as conceptions of human beings in Darwinian terms, language as tool of tools, which Rorty describes as a "naturalistic, behaviouristic attitude toward language" (Rorty, 1982, p. xxi) and rejection of dualistic theses, transcendental conceptions of truth and objectivity, which Rorty regards as portraying the right attitudes towards naturalism. I also discuss Rorty's criticism of some core issues in Dewey's naturalist project such as his reconceptualization of human experience, naturalist ontology, and experimentalist theory of knowledge.

I conclude the section by exploring the argument that Rorty's critique of Dewey's naturalism, like his rejection of metaphysics and epistemology, is part of his project to herald a post-philosophical tradition which makes him, sometimes, choose to interpret Dewey in certain compromising ways, such as projecting a therapeutical stance on Dewey's work. I argue that this makes Rorty an unfaithful Deweyan. I contend that seeing Rorty as holding a version of naturalism entirely different from Dewey's would have done more justice to the scholarship of both philosophers. I start the discussion by sketching Rorty as a naturalist.

4.5.1 Articulating Rorty's naturalism: the apparent endorsement of Dewey's naturalism

One of the important points about Rorty's claims on naturalism is that they are mostly negative theses: no human nature, no pre-scientific or extra scientific point of view, no dualism between mind/body or spirit/non-spirit, no absolute truth or no "patterns of justification within normal discourse that is hooked on to something extra-linguistic we can call Reality, Truth, Objectivity, Reason" (1979, pp. 385, 388), no general synoptic way of analysing the functions knowledge has in universal contexts of practical life (1979, p. 381), no permanent framework for inquiry (1979, p. 380), and no nature's criteria for inquiry (1979, p. 299).¹⁰² Two further important points are notable. First, Rorty believes that all these positions he rejected are crucial to essentialism. Second, he usually contrasts essentialism with naturalism. For instance, he thinks his rejection of representationalism and foundationalism provides a good ground for subscribing to naturalism.

The impression that pervades Rorty's *Philosophy and the Mirror of Nature* is that he treats some versions of "naturalism" as suspect based on their explicit or implicit subscription to essentialism. For instance, he argues that "the standard philosophical strategy of most naturalism is to find some way of showing that our

¹⁰² In addition, he warns about the "dangers of philosophy becoming too naturalistic" (Rorty, 1979, p. 168). He offers two examples: (i) a philosophy that "reduces norms to fact and (ii) when a philosophy is reduced to or draws excessively from psychology (he called this psychologism) (Rorty, 1979, pp. 166-168). Rorty believes that his rejection of "representationalism" provides a good ground for the rejection of any essentialist version of naturalism.

culture has indeed got hold of the essence of man” through which “a firm philosophical basis” can be established for the explanation and justification of our philosophical theories (1979, pp. 36, 362). One of his favourite examples of an “essentialist tradition” is the Cartesian conception of mind. For him, Cartesianism is an essentialist tradition because it identifies human mind as an essence. Generally, an essence is thought of as a property or set of properties (an attribute or set of attributes) that necessarily defines a phenomenon. The Cartesian tradition presents human mind (or soul) as what differentiates human species from other living things- having “representative powers” and capacity to “mirror” the world.¹⁰³ Rorty acknowledges that Dewey is an exception to this essentialist tradition which he described as Dewey’s “peculiar achievement”. I start the articulation of Rorty’s naturalism from this commendation.

In *Objectivity, Relativism, and Truth*, Rorty acknowledged that, (concerning Dewey’s anti-foundationalism and anti-representationalism) Dewey “takes off from Darwin rather than from Descartes: from beliefs as adaptations to the environment rather than as quasi-pictures” (Rorty, 1991, p. 10). According to him, Dewey is a good naturalist for two reasons: (i) he did “not think of natural science as having an inside track on essences of things” and (ii) he thought of human beings in Darwinian terms (Rorty, 1979, p. 362). He counted it as “a great virtue” in Dewey’s pragmatism in the sense that “it points the way toward, and partially exemplifies, a non-epistemological sort of philosophy, and thus one which gives up any hope of the transcendental” (Rorty, 1979, p. 381). Rorty defines a “non-epistemological philosophy” in terms of theses such as: (i) a non-transcendental and “non-epistemological” philosophy states that there is no inevitable subjective condition which both make a theory possible and place limits on it, (ii) it rejects the notion of one-on-one correspondence between truth and reality (Rorty, 1979, pp. 381-382) and rejects seeing the task of epistemology in terms of what Rorty describes as *metapractice*: offering *the critique of all possible forms of social*

¹⁰³ Another example from Rorty is that the naturalists think that if we assume we possess any “non-physical inner state” it can be used to explain our understanding of “raw feels” which in turn might help us understand our moral responsibilities” (Rorty, 1979, p. 36).

practice (Rorty, 1979, p. 171). In addition, a de-transcendentalized epistemology gets “rid of spirit-nature distinction, conceived as a division between human beings and other things, or between two parts of human beings corresponding to the distinction between hermeneutics and epistemology (Rorty, 1979, p. 379).

The impression Rorty created from this acknowledgement of “aspects” of Dewey’s naturalism or pragmatism is that he is comfortable with these aspects of Dewey’s “naturalism”. Towards the end of *Philosophy and the Mirror of Nature*, Rorty summarises his position on naturalism when he writes:

The wholehearted behaviourism, naturalism, and physicalism I have been commending in earlier chapters help us avoid the self-deception of thinking that we possess a deep, hidden, metaphysically significant nature which makes us “irreducibly” different from inkwells or atoms (Rorty, 1979, p. 373).

The connections between Rorty’s naturalism and his other supposed inter-linked theories (behaviourism and physicalism) have been challenged by his critics on the ground that holding a substantive (or positive) theory of reality is essential for any meaningful subscription to such metaphysical theories (Allen, 2000; Brandom, 2000; Williams, 2000). I will not repeat the argument here. Rather, I want to concentrate on the peculiarities of his version of naturalism and critically examine it in light of Dewey’s version, which I take to be more robust and significantly different. More importantly, I argue that it is only by understanding the peculiarities of Rorty’s notion of naturalism that one can understand his commitment to the argument that *the quest to abandon metaphysics is a consequence of pragmatism*. The “naturalism” and “pragmatism” in question are his versions and not Dewey’s. The question I want to explore is what are the similarities in the versions of pragmatism and naturalism in the philosophies of Dewey and Rorty that warrant Rorty’s claim to be a Deweyan? Are the differences in these two philosophies so significant that it is inevitable that Rorty ended up as an anti-metaphysician and Dewey with a naturalist metaphysics? I now consider the possibility of seeing Rorty as a non-Deweyan naturalist.

4.5.2 Articulating Rorty's naturalism: the anti-Deweyan version

The central argument that runs through chapter one to chapter three of this thesis is that Dewey's metaphysics and epistemology rest on his version of naturalism. His claims that human beings and their experiences are part of nature and that human beings (as knowers) are not spectators but rather are active forces using knowledge experimentally and instrumentally to re-order and manipulate the world are instances of Dewey's naturalist theses we have considered. If Dewey's naturalism leads to substantive theories in epistemology and metaphysics, how can Rorty be justified in interpreting Dewey's philosophy as therapeutic? Is Rorty contradicting himself?

I contend that Rorty is not contradicting himself and that he has a conception of who a naturalist is, that he is consistently and implicitly sticking to. The explanation is that Rorty commends Dewey only in those instances he was explicitly rejecting traditional positions on philosophical issues. He commends Dewey for rejecting positions such as mind/body dualism and Spectator Theory of Knowledge. On these occasions where Dewey is therapeutical; preoccupied with consistent repudiation of traditions, he is a naturalist. However, when Dewey is preoccupied with replacing these repudiated old traditions with new ones or re-framing problematic old questions in some enlightening new ways that answers could be easily attained, Rorty brands him as a derailed naturalist. Consequently, being a naturalist, in Rortyan sense, is synonymous with consistently holding a therapeutic stance. I contend that this point becomes clearer after considering some of the arguments that Rorty raised against some of the theses we have identified as crucial in Dewey's version of naturalism. For present purposes, I discuss two: his rejection of Dewey's naturalist conceptions of human nature and epistemology as problem-solving.

4.5.2.1 Rorty's rejection of Dewey's naturalist conception of human nature as pre-scientific.

I start this section by arguing that Rorty did not wholeheartedly subscribe to the idea of human nature that is evident in Dewey's naturalist philosophy. This disagreement appears in several forms. Firstly, for Rorty, "the question of whether there are any beliefs or desires common to all human beings is of little interest apart from the vision of a utopian and inclusivist" (2000e, p. 1). By "utopian" he meant someone who has hopes for or embarks on a project even in the face of contravening evidence.¹⁰⁴ An "inclusivist" would be a person who is ambitious and is preoccupied with breaking cultural hegemonies. Secondly, Rorty contends that there is "no such thing as "human nature" or "man's true place in the universe" to be discovered once and for all- and hence no need for a foundational discipline such as theology or metaphysics" (2010, p. 20).¹⁰⁵ With this premise rejected, for Rorty, "there is no point thinking that "philosophy must centre on the discovery of a permanent framework for inquiry" or engage with the quest for "a general synoptic way of "analysing" the functions knowledge has in universal contexts of practical life". He argues that "cultural anthropology (in a large sense which includes intellectual history) is all we need" (Rorty, 1979, pp. 380-381).¹⁰⁶

What "human nature" (outside the scope of science) is Rorty denying? If by his denial of "human nature" he meant *the denial of some supposed cognitive endowments in human species (such as having a mind that is inherently equipped to play the foundational role of cognitive architectures or a "mind" capable of*

¹⁰⁴ At this point, one can ask if Rorty is also seeing "pessimism" as one of the consequences of pragmatism.

¹⁰⁵ Rorty compares Dewey's pre-scientific description of or theory of human being with theory of beings in the philosophy of Habermas and Husserl's notion such of "phenomenology of the life-world" (1982, p. 382) and attributed the quest for a non-scientific foundation as the motive. This is one of numerous occasions where Rorty attempts to lump Dewey with other philosophers with different and often incompatible ideological orientations. However, in this work, I will not address the question whether Rorty has the right to lump these philosophers together or not.

¹⁰⁶ Rorty's stronger argument is that there is nothing like universal truth because there is no basis for such universality. This appears to be a point in which Rorty is torn between Dewey's pragmatism and the nihilist position of philosophers such as Friedrich Nietzsche and Soren Kierkegaard. These are two other influential philosophers on his work.

mirroring nature) as found prominently in Descartes and Locke (Rorty, 1979, p. 213) then, he is still in line with Dewey's rejection of Kant's conception of the cognitive abilities of the human mind. In chapter three, we discussed how Dewey rejected Kant's conception of human mind because it was presented as if it is inherently endowed with "magical" cognitive powers. Alternatively, Dewey contends that the human mind functions as a "social device"; with thought and reflections explained in terms of responses to nature. We also discussed Dewey's conception of human nature in terms of how human happiness, desires, sorrow (which Dewey meticulously described as "esthetic experience"), have bearings on their actions. These are the examples of "practical life" that Dewey was linking with the foundation and functions of knowledge in *Experience and Nature*. If Rorty sees no point in philosophers engaging with this kind of preoccupations, then, his version of naturalism and Dewey's might not have anything fundamental in common.

However, what I take to be the most irreconcilable disagreement between Rorty's and Dewey's naturalism is this: Dewey sees human nature, such as being active experimentalists, inquirers, thinkers, and so on, as primarily natural propensities and only secondarily social or cultural. These propensities, for Dewey, are "generic traits" to be discovered. However, the natural and the social are not merely "symbiotic" but they are co-constitutive, integrated dynamically into ongoing situations. It is only afterwards, in an inquiry's analysis that they can be pulled apart and labelled. However, it seems Rorty's point is that all these supposed features of "human nature" are inherently social in their origin and consequently there is no basis for referring to them as "human nature" that can be conceived as universal or discoverable through philosophical theories.]

However, for Dewey, the recognition of human beings as part of nature as well as the recognition of human activities as responses to nature is the cornerstone of his naturalistic metaphysics and epistemology. As rightly noted by James Allard:

Dewey attributed the major problem in traditional and modern epistemology to the separation of man from nature, which raises the problem of how subjective human

mind can represent nature or how subjective human experience can beget objective knowledge (Allard, 2010, p. 53).

The solution is found in Darwin's evolutionary theory, as Dewey "naturalized" "the knowing subject by revealing it to be a living being adjusting to its world" (Allard, 2010, pp. 53, 58). Thus, Dewey's recognition of the symbiotic relation between man and nature is meant to be highly illuminating with respect to human nature. Rorty agreed with Dewey that "the distinctive office, problems and subject-matter of philosophy grow out of stresses and strains in the community life in which a given form of philosophy arises" (Rorty, 1998, p. 5). But apparently, Rorty interpreted what Dewey meant in a way that is incompatible with the core thesis of Dewey's philosophy.

For Rorty, "the stresses and strains Dewey has in mind are those that arise from attempts to understand new ideas using outdated sets of concepts or organising principles (Rorty, 1998, p. 5). This simply means, for Rorty, the problematic situations one confronts when one is trying to run both therapeutical and constructivist stances together. However, by "stresses and strains", Dewey meant the problematic in human transactions with nature in which the raw encounter with nature (which he usually referred to as non-reflective, primary experience (J. Dewey, 1925, pp. 1-36) paves the way to theories of knowledge (which he usually referred to as secondary or reflective experience). Dewey identified these "stresses and strains" with "practical problems of men" (for instance, practical concerns about survival) which he differentiated from "the more technical concerns of professional philosophy (for instance, theoretical inquiries about the relation between mind and body) (J. Dewey, 1968, p. 18). More importantly, he identifies the function of knowledge strictly in terms of how to *find solution to recalcitrant or problematic human situations*.

Dewey identifies some factors (human nature; traits) that are similar in every social context and can be used in formulating theories and ascertaining a basis for a general notion of truth. For instance, the symbiotic relation between man and nature that naturally prompts human beings to adapt, to modify and transform their environments, arguably actuates similar experience across cultures. The

approach may vary across contexts and time but the modalities are similar. As rightly noted by Michael Peters:

One cannot step outside of the social, or beyond socialization. Nevertheless, it is important to understand the dynamic relation between the social and the biological, otherwise one is left with the untenable notion that human beings exist as some kind of tabula rasa (Peters, 2001, p. 150).

For Peters, given that human will and desires are still biosocially intertwined, Rorty's postulation of a false antimony between social and human nature is unacceptable. Rorty's commitment to anti-essentialism forecloses the possibility of a platform by which both social and non-social human nature can run together.

Does Rorty's "commendation of Dewey's naturalism" apply to Dewey's theory of "generic traits"? I think the "commendation" breaks down when one considers Rorty's more damaging critique of Dewey's notions of naturalism and experience. Rorty argues that there are several tensions in Dewey's work that support his reading of Dewey's philosophy as therapeutic. He writes;

Consider Dewey's devastating remark about the tradition: "Philosophy has assumed for its function a knowledge of reality. This fact makes it a rival instead of a complement to the sciences." To pursue this line of thought, one must renounce the notion of an "empirical metaphysics" as wholeheartedly as one has already renounced a "transcendental account of the possibility of experience." I see no way to reconcile such passages as this, which I think represent Dewey at his best, with his answer to Santayana-his talk of "generic traits". Sympathetic expositors of Dewey-as-metaphysician-such as Hofstadter, who describes "the aim of metaphysics, as a general theory of existence" as discovery of the basic types of involvements and their relationships" – cannot, I think, explain why we need a discipline at that level of generality, nor how the results of such "discoveries" can be anything but trivial (Rorty, 1982, p. 77).

Rorty thinks that Dewey got derailed into an anti-naturalist or essentialist programme by looking for some generic traits of existence. This passage raises Rorty's strongest objection against the substantiveness of Dewey's naturalism or "empirical metaphysics". He thinks Dewey's own view of the nature and function of philosophy precludes such an "empirical metaphysics", or the investigation of a subject-matter (such as generic traits of all existence): with a level of generality outside science. He also argues further that all attempts to analyse categorically

the nature of these “generic traits” and identify the method that can be employed in producing them; in a way that is different from what laboratory scientists are dealing with, have failed (Rorty, 1982, p. 73). From this denial he argued that there is nothing in Dewey’s work that can be called a “metaphysics of Experience” (Rorty, 1982, p. 77). He contends that Dewey has the habit of “announcing a bold new positive program when all he offers, and all he needs to offer, is criticism of the tradition” (Rorty, 1982, p. 78).

However, Rorty’s attribution of the view about “the nature and function” of metaphysics that rivals science, to Dewey, *misrepresents Dewey’s passage*. Dewey, in the passage quoted by Rorty was pejoratively describing the traditional idealistic metaphysics he was rejecting. The passage that Rorty quoted reads thus,

A final word about philosophy is then in place. Like religion it has come into conflict with the natural sciences... since the seventeenth century. The chief cause of the split is that philosophy has assumed for its function a knowledge of reality. This fact makes it a rival instead of a complement to the sciences ... In consequence, it has, at least in its more systematic forms, felt obliged to revise the conclusions of science to prove that they do not mean what they say, or that, in any case, they apply to a world of appearances instead of to the superior reality to which philosophy directs itself. Idealistic philosophies have attempted to prove from an examination of the conditions of knowledge that mind is the only reality (J. Dewey, 1930, p. 294).

Dewey’s metaphysics is a rejection of the appearance/reality distinction and the view that the human mind has an existence independent from the body. His metaphysics is a rejection of idealistic metaphysics. Rorty’s failure to distinguish between Dewey’s position and the position he was rejecting, shows Rorty’s “unfaithfulness” to Dewey. Dewey explains how problematic human transactions with nature create the condition for a naturalist metaphysics. According to him, a philosophy that emerges under such conditions “is a liaison officer between the conclusions of science and the modes of social and personal actions through which attainable possibilities are projected and striven for” (J. Dewey, 1930, p. 295). The tension that Rorty claimed to exist between Dewey’s definition of philosophy and the subject-matter of his naturalist metaphysics, on one hand, and the rivalry he anticipates between this version of metaphysics and science, on the other, does not exist.

Rorty seems to be comfortable with his idea that experimentations are meant to alter human conditions. Declarations such as “the direction of inquiries is steered by human interests”, that philosophers should not care about “problems that no longer have practical importance” (2010, pp. 21-22), and that the distinction between knowledge and opinion “is a practical rather than a theoretical matter” (2000d, p. 217), are pointers to his endorsement of Dewey’s experimentalism and instrumentalist conception of knowledge and language. However, he pejoratively compares Dewey’s experimentalism with “literary experimentalism” in which a fiction writer experimentalizes with new literary forms. Rorty’s point is that whatever Dewey hoped to achieve with his notions of experimentalism and naturalism, it cannot go beyond the use of conversations in language. I argue that the only version of “literary experimentalism” that Rorty can claim will be “thought experiments”; which we have argued to be incompatible with the essential practical nature of Dewey’s experimentalism that we have discussed in Chapter 3.¹⁰⁷ Rorty’s pejorative comparison of Dewey’s naturalism with Wordsworth’s poetic description of nature, betrays his sceptical attitude towards the idea that a metaphysics could be derived from Dewey’s notion of naturalism or that there could a metaphysics that is empirical and experimental. This contention amplifies his bewilderment that anyone could imagine the idea of Dewey having a metaphysics that can be assimilated to the genre which includes the central books of Aristotle’s *Metaphysics* or Spinoza’s *Ethics*, and so on (Rorty, 1982, p. 72). This fact makes it evident that Rorty is not being “faithful” to Dewey, as a self-professed Deweyan. I now discuss how Rorty’s critique of Dewey’s conception of epistemology as problem-solving further amplifies our contention that Rorty’s naturalism is anti-Deweyan.

¹⁰⁷ However, this contention does not rule out the plausibility of Rorty’s naturalism best described as linguistic naturalism and considered a rival to Dewey’s version.

4.5.2.2 Rorty's critique of Dewey's conception of epistemology as problem-solving

In chapters 1 to 3, we discussed Dewey's conception of experience and its importance in his versions of naturalist metaphysics and epistemology.¹⁰⁸ Consequently, for Dewey, knowledge is an instrument for manipulating and re-ordering nature. A claim to knowledge is justified by virtue of how holding it will warrant or be sufficient enough for stabilizing a recalcitrant or precarious situation. In his explanation of how this problem-solving conception of epistemology dominates modern thought, Dewey writes:

The problem of restoring integration and cooperation between man's beliefs about the world in which he lives and his beliefs about values and purposes that should direct his conduct is the deepest problem of any philosophy that is not isolated from life (J. Dewey, 1939, p. 523).

It is in this sense that Dewey's conception of epistemology as problem-solving becomes an important thesis in his version of naturalism.¹⁰⁹ The conception also marks Dewey's project of reconstructing philosophy.

In *Consequences of Pragmatism*, Rorty offers a radical critique of Dewey's naturalism, specifically directed at Dewey's conception of epistemology as essentially problem-solving. According to Rorty, determining the nature of knowledge or justification of our claims to knowledge by relying on its causal antecedents is unacceptable.

But this return to a Lockean mode of thought, under the aegis of Darwin, betrayed precisely the insight which Dewey owed Green: that nothing is to be gained for an understanding of human knowledge by running together the vocabularies in which we describe the causal antecedents of knowledge with those in which we offer

¹⁰⁸ In *The Quest for Certainty*, Dewey contends that the most urgent of all practical problems is how to decide how our most authentic and dependable cognitive beliefs be used to regulate our practical beliefs and how the latter can serve in organizing and integrating our intellectual beliefs (J. Dewey, 1930, p. 21). In *The Problem of Men* he differentiates between the "technical problems" of the Academic or Professional philosophers and the "practical problems of men" and argues that the latter problems constitute the "original" problems of philosophy (J. Dewey, 1968).

¹⁰⁹ Given this focus on "human problems" and values, various scholars have described Dewey's version of naturalism as humanistic naturalism or humanistic pragmatism (Bupp, 2001), (Selznick, 2008).

justification of our claims to knowledge... To say, as Dewey wants to, that to gain knowledge is to solve problems, one does not need to find “continuities” between nervous system and people, or between “experience” and “nature.” One does not need to justify our claim to know that, say, a given action was the best we could take by noting that the brain is an “organ of action-undergoing,” any more than by pointing out that the particles which make up the brain are undergoing some actions themselves. Dewey, in short, confuses two ways of revolting against philosophical dualism...(Rorty, 1982, pp. 81-82).

By “Lockean mode of thought”, Rorty runs two explanations together. There is a Lockean historical method that acknowledges the importance of the causal antecedent of the process of knowing. A Deweyan would have no objection to this requirement for an empirical epistemology; as a naturalistic requirement. However, there is another explanation of the “Lockean method” that Rorty offers; assimilating psychological issues to conceptual issues. For Rorty, this methodological approach enables Locke, although unacceptably, to “assimilate all mental acts to raw feels” (1982, p. 82). I will not attempt a defence of Locke’s epistemology here. But what is relevant, for present purposes, is that forging a demarcation between the psychological and conceptual aspects of human knowledge is typically an anti-Deweyan position and consequently, the reconciliation of the two aspects cannot be part of Dewey’s philosophical goals since he never separated the two in the first place. One must wonder why Rorty is comparing Locke’s reductionist or assimilationist program with Dewey’s arguably non-reductionist philosophy.

How can “running together” the account of our causal experience with our theories of justification constitute a non-naturalistic stance? Dewey’s treatment of the biological, psychological, environmental, and socio-cultural factors concerning knowledge as the matrix for a human-nature symbiotic relation is to prove that these factors are not mutually exclusive on a naturalist program. The lesson from Dewey’s understanding of generic traits of existence is that the history of human species is just one continuum. Seeing some aspects of it as biological, neurological, sociological, or cultural is as a matter of conceptual sophistication or theoretical convenience. Is the disagreement between Rorty and Dewey a

dismissible conceptual disagreement? I think it goes beyond conceptual misunderstanding. I will offer two explanations for this view.

The first problem Rorty has with Dewey's position concerns the question: Why did Dewey follow in the footsteps of Locke by asking questions about the link between psychological and conceptual aspects of our knowledge? Locke followed this path to establish the foundation of our knowledge of external world. In this sense, he is a constructivist in Rortyan terms. For Rorty, a therapeutic approach is all that Dewey needed to be a naturalist. Consequently, Rorty declares the Lockean approach as pointless.

4.6 Chapter summary:

In this chapter, I explored how and to what extent fundamental issues in Dewey's philosophy are preserved, modified, or rejected in Rorty's neo-pragmatism. The choice of Rorty was informed by his declaration of himself a Deweyan and the unequivocal remarks often credited to him such as his announcement of "the end of philosophy"; a remark which in my argument is a pointer to Rorty's unfaithfulness to Dewey.

In section 1, I articulated some distinctions between contemporary pragmatists by differentiating those whose philosophical views are closer to the classical pragmatists (neo-classical pragmatism) from others whose works are arguably incompatible (post-pragmatism). This was to set a framework for exploring whether self-professed Deweyans such as Rorty are really neo-pragmatists or post-pragmatists, based on how and to what extent Dewey's original ideas are preserved in their works.

In section 2, I established Rorty as a Deweyan on the basis that he maintained Dewey's rejection of foundationalism- in the sense of a theory of epistemic justification that attaches absoluteness or transcendentalism to the concept of truth and certainty or incorrigibility to the concept of knowledge. However, following Haack's articulation of versions of foundationalism and Rockmore's articulation of "ontological foundationalism", I established that Dewey need not

be an anti-foundationalist, exclusively, in the Rortyan sense. I argued that Dewey's philosophy is comprised of anti-foundationalism (in Rortyan sense) and ontological foundationalism (in anti-Rortyan sense), and that the two theories are not mutually exclusive.

In addition, I rejected Rorty's claim that adopting coherentism is one of the consequences of rejecting foundationalism because it created a false dilemma, given that other various versions of foundationalism (such as weak foundationalism and Haack's found-herentism) and non-foundationalist theory (such as contextualism) are recognized alternatives to radical foundationalist theory of justification that he rejected. I considered the prospects for a contextualist theory of justification in Dewey's epistemology to be more relevant because of his conception of nature as dynamic and the role plays by environmental or evolutionary changes in his theory of knowledge.

I also rejected Rorty's argument that the rejection of foundationalism necessarily heralds the dismissal of Philosophy. I compared Dewey's philosophy with the description of "Philosophy" that Rorty rejected and found them significantly different. Exploring Rorty's description of "Philosophy" in terms of normative epistemology playing the role of "First philosophy", I argued that the notion of normativity in Dewey's epistemology is not restricted to philosophical knowledge but extends to all forms of human knowledge. Consequently, the concept of an over-bearing or authoritarian Philosophy, the kind Rorty had in mind, does not arise. I reiterated Dewey's position that metaphysics provides the road-map for epistemology in terms of how problematic situations in human transaction within nature engenders the quest to know (such as how to subdue nature). I argued that the importance that both Rorty and Dewey attached to the "foundation" they have identified for philosophy, established the incompatibility of their positions.

Furthermore, I explored the argument that the continuity between Dewey's epistemology and traditional epistemology is a refutation of Rorty's claim. On the continuity between Dewey's naturalist epistemology and traditional epistemology, I reiterated Dewey's view on scepticism and identified the epistemic goal of

discovering truth and avoiding error that characterises it with traditional epistemology. I argued that this fact points to continuity between traditional epistemology and Dewey's naturalist epistemology. I concluded the section by arguing that Rorty has not been able to establish his anti-foundationalist and coherentist positions within the framework of Dewey's epistemology.

In section 3, I discussed Rorty's critique of representationalism from two perspectives: in terms of the human mind and languages having capacity to mirror nature and the idea that there must be a cognitive faculty or a phenomenon to serve as a link between the knower and the known. I agreed with Rorty that Dewey is an anti-representationalist in this sense because Dewey replaced the traditional conception of the human mind with an empirical and social conception and defined language as tool of tools. In both preoccupations, language and the human mind do not have the capacity to mirror nature.

However, I identified a more prominent perspective of being an anti-representationalist in Rorty's work- holding a therapeutical stance. This stance dismisses all traditional problems of philosophy as pseudo-problems. I explored how Rorty classified the realists, the anti-realists, sceptics, and the anti-sceptics as "representationalists" because they regarded the traditional problems of philosophy, such as the problems resulting from the quest for truth, objectivity and foundational knowledge, as genuine problems. I considered Dewey as an anti-representationalist in this therapeutical sense and found Rorty's claim to be unacceptable. I agreed with Rorty that in Dewey's later work, there are suggestions about abandoning conceptions such as dualism between mind/body, objectivity/subjectivity, experience/nature, and knower/known because they are untenable. I cited Dewey's recommendation that a classical "theory of natural ends" must be rejected because it contradicts some principles in astronomy and physics. I discussed how he generally rejected any version of metaphysics that is presented either as "a rival instead of a complement to the science" or that employs non-empirical methodologies because it "denatures" natural phenomena. This is the kind of metaphysics he usually tagged as non-natural or transcendental philosophy.

However, I argued that Rorty overstretched Dewey from a position we can describe as a “selective therapeutical stance” to a radical or total therapeutical stance. I argued that Dewey has a metaphysics that employs empirical methodology. He developed theories of human mind, human nature, knowledge, and truth, in lieu of the traditional accounts or notions he rejected. I concluded that Rorty conflated his two senses of “anti-representationalism” in his interpretation of Dewey and ended up being a critic of Dewey rather than a Deweyan. On what could be responsible for Rorty’s conflating therapeutical and constructivist stances in Dewey’s position, I disagreed with Boisvert and Neville in their contention that Rorty failed to acknowledge the “metaphysical nature” of Dewey’s preoccupation with issues such as human-nature symbiotic relations, traits of existence, human experience, and their significance in Dewey’s naturalism. I argued that the problem lies in the differences between their attitudes toward metaphysics and conceptions of naturalism. These are the differences Rorty wanted to mitigate.

In section 4, I considered the possibility of explaining the differences between Rorty and Dewey by contrasting the former as an-anti-realist. I discussed Rorty’s critics, such as Putnam, who have taken up Rorty’s claim that “there are no constraint on inquiry apart from conversational ones”, as a pointer to an anti-realist position. According to Putnam, Rorty denied reality but continued using words and phrases that point to a subscription to realism. He compared Rorty’s position with the positivists’ phenomenalist “construction of the world” and that it consequently faces the same problems.

I agreed with Brandon’s view that it could be erroneous to classify Rorty as an anti-realist based on the contention that his (Rorty’s) position is only making a distinction between causal considerations and justification considerations in respect of use of languages rather than stating that only languages exist. With the use of language cast in a justificatory role, the moral lesson is that there is no need to be either a realist or an anti-realist. Rather, what is needed is an audience of competent language users who are demonstrating their competency in making meaningful conversations. I compared this neither-realist-nor anti-realist position

with Dewey's position and found them incompatible. I reiterated our conclusion in chapter 1 that those labels (realism, anti-realism) do not apply to Dewey because he has a theory of reality that entails the narratives of both realism and anti-realism. It is on this point that Rorty's departure from Dewey became more glaring. For Rorty, for instance, we can localise (or normalise) our conversation by not appealing to any ontological theory. We can sit on a chair, sip coffee or take a stroll without needing the question: What is real? However, for Dewey, human transactions are interwoven with each other and consequently too complex for such attitude or approach. I concluded that while a Rortyan may not necessarily be committed to either realism or anti-realism, a Deweyan necessarily needs a theory of reality.

In section 5, I identified some theses of naturalism with which Rorty agreed and contrasted them with those he rejected rather than trying to identify naturalism in terms of metaphysical, ontological, or methodological versions. One notable feature of these theses is that they are negative, in the sense of stating what naturalism is not about. Rorty rejected naturalism that entails "essentialist tradition". By this tradition, he meant any attempts towards finding "a firm philosophical basis" in phenomena (such as human mind, language) for the explanation and justification of our philosophical theories. He believes that his rejection of representationalism and foundationalism provides a good ground for refuting any version of naturalism that entails such tradition. He also rejected the kind of naturalism in which philosophers attempt to reduce norms to facts or reduce philosophy to or draw excessively from psychology.

I discussed Rorty's appraisal of some aspects of Dewey's naturalism. I cited how he praised Dewey for providing a good example of naturalism that rejects essentialism, not thinking of science as having inside track on the essence of things, thinking of human beings in Darwinian terms, breaking down the spirit/nature barrier and rejecting transcendentalist and absolutist approach to truth, knowledge, and objectivity. However, a deeper articulation of Rorty's critique of some aspects in Dewey's naturalism shows that Rorty was inconsistent. For instance, Rorty rejected Dewey's conception of man as pre-scientific, his pre-

occupation with traits of existence as essentialistic and described his version of metaphysics “as a good example why no one needs a metaphysics”.

In my explanation of the differences between Rorty and Dewey’s positions, I considered the possibility of Rorty misinterpreting Dewey in different incompatible ways. I also considered the possibility that Rorty started as a Deweyan with some significant tolerance towards Dewey’s naturalism at the initial stages of his neo-pragmatism (most especially in PMN) but turned radically away from him in his post-PMN work. I considered both explanations too speculative. Alternatively, I considered the argument that Rorty only accepted Dewey as a naturalist in the sense in which his (Dewey’s) work is interpreted as therapeutic. In those instances, where Dewey emphatically rejected essentialism, foundationalism, the conceptions of human mind and language as mirrors of nature, mind-body dualism, transcendentalized truth and objectivity, and so on, Rorty considered him a naturalist. He described Dewey’s preoccupation, in this direction, approvingly, as “a non-epistemological sort of philosophy”. However, he regarded Dewey as un-naturalistic in those instances where he believed Dewey got distracted or derailed into metaphysics or epistemology in terms of doing what Rorty called constructivist engagements with traditional problems of philosophy: asking and answering questions that are meant to present some traditional problems of philosophy as genuine. I argued that this explanation is a pointer to the fact that Rorty has a conception of naturalism that is radically different from Dewey’s and that this is responsible for the differences in their conceptions of epistemology and metaphysics.

I agreed with Haack and Shusterman who have noted some problematic tendencies in Rorty’s interpretation and presentation of Dewey’s philosophy. These tendencies include (i) mistakenly treating some philosophical concepts and positions as having monolithic meaning or being non-controversial (ii) selecting some portions of Dewey’s work and articulating it as if it represents the philosopher’s entire position or philosophy, and making over-generalized claims such as saying “we pragmatists”- as if pragmatists have a uniform position on all issues. Many of these critics have argued that these “defects” were responsible

for Rorty's misrepresentation or misconstrual of Dewey's position. Some have argued that Rorty's anti-philosophical" motive led to his apparent misconstrual of Dewey's position, to suit his new and radical perspective on philosophy. I have explored this tendency in Rorty's construal of Dewey as holding a therapeutic stance rather than as a philosopher who is interested in transforming philosophy. I explored some of these contentions that Rorty misconstrued Dewey at several points and found them plausible.

I also agreed with Haack, Shusterman and Manicas that the motives behind Dewey and Rorty's engagements with philosophical issues are very important with respect to understanding, interpreting, or even attempting any kind of modifications on their works. I noted Rorty's motive for establishing similarities between the works of philosophers such as the American pragmatists like Dewey and Wittgenstein, Derrida, and Heidegger, to break the "historical hegemonies" between the American, Anglo-Saxon, and Continental philosophies. I have noted that this brings about confusion in Rorty's presentations of Dewey's original ideas. As rightly noted by Haack, Rorty's motive to establish a post-philosophical tradition is responsible for the interpretations he chose for philosophical theories he was rejecting and equally defines his tactics for looking for other philosophers such as Dewey as potential "allies". Contrary to Rorty's "motive", any proper understanding of Dewey, as noted by Manicas, "requires that we acknowledge how radical his effort to reconstruct philosophy was" [Manicas, 2008, 283].

I concluded that the real problem is that both philosophers have different versions of pragmatism or better still, naturalism. I disagreed with some critics (Boisvert, 2010) who argue that Rorty missed Dewey's naturalism on the ground that Rorty actually wanted to impose his version of naturalism on Dewey's. I also disagreed with critics who argue that Rorty should be regarded as a critic of naturalism (Wagner & Warner, 1993, pp. 4-5) on the ground that Rorty has his own version of naturalism, although incompatible with Dewey's version. While at the centre of Dewey's version of naturalism, as rightly noted by Shusterman, is the need to reconceptualise human experience (Shusterman, 1999, p. 194), Rorty's naturalism needs merely a simple form of pragmatism that emphasises "practical significance"

and guarantees continuity of debates (Rorty & Engel, 2005, p. 34). This is a naturalism that is defined in terms of “real” language-users who are continuously engaged with one another in literary and cultural criticism without any need for what Shusterman describes as philosophical “back up” (Shusterman, 1994, p. 393). As rightly noted by Manicas, Rorty should be regarded as one of the critics of Dewey (Manicas, 2008, p. xiii) rather than as a Deweyan. I now discuss the relevance of John Dewey in contemporary philosophy. I start by considering how his naturalist views are important to the debates on the nature, scope, and goals of social epistemology.

Chapter Five:

The relevance of Dewey's naturalist epistemology to contemporary social epistemology

5.0 Introduction

This chapter establishes further the relevance of John Dewey in contemporary philosophy by engaging his epistemology with some contemporary social epistemologists in a debate concerning the nature, methods and goals of social epistemology. The aim is to argue that taking a Deweyan approach would advance the debate rather than argue that the protagonists in the debate are directly influenced by Dewey's work.

The chapter begins by outlining the key tenets of contemporary social epistemology. This will be guided by two questions. The first question is, is "social epistemology" continuous with "traditional" epistemology, or a new field? This question is based on the premise that there is a branch of philosophy known as epistemology which is concerned with the nature, scope, and methods of acquiring knowledge in general but with specific focus on human knowledge. The nature of this "philosophical approach" to knowledge is believed, in some significant ways, to be different from approaches used in other fields such as physics, chemistry, or economics. The second question is, if social epistemology is not continuous with traditional epistemology, in what ways can it contribute to philosophical attempts to understand knowledge? Consequently, I start by identifying two rival positions on social epistemology: one claiming that social epistemology is a new field and the other denying the claim. The first position, exemplified by scholars such as Fuller and Kitcher, I label radical social epistemology. The second position, exemplified by Kornblith and Goldman, I label a moderate position.

This chapter has three sections. In the first section, I recall some of the important features of traditional epistemology that we have discussed in chapter three.

However, my focus is on how epistemology has been differentiated from closely related disciplines in social sciences such as sociology and psychology.

In section two, I explore the debate about the nature, focus, methodology and goals of social epistemology. I compare the positions of the radical and moderate social epistemologists by exploring three disagreements between them. The first disagreement concerns the nature of social epistemology. For instance, Fuller argues that traditional epistemology and social epistemology are different. The former, he contends, treats knowledge acquisition as a prerogative of individuals, in the sense that it is possessed by individuals and verified by individuals. By contrast, he contends that the latter treats knowledge as ultimately a social phenomenon because it depends on shared language, shared practices of inquiry, and social institutions that endorse knowledge. His conclusion is that the methods and goals of social epistemology are peculiar to social sciences rather than philosophy (Fuller, 1988, p. 24).

Moderate social epistemologists such as Kornblith and Goldman admit that traditional epistemology has been dominated largely by concentration on individual inquirers or knowers but contend that this preoccupation has a plausible rationale- knowers are individuals using their brains, senses and inferential mechanisms to establish knowledge. They also admit that mechanisms for knowledge production is inadequate if they exclude factors in the natural and social environment in which they live. However, they contend that traditional epistemology does not treat individual and social factors of knowledge as mutually exclusive. Besides, they contend that social epistemology is continuous with traditional epistemology because both offer theories about knowledge.

While articulating and evaluating the contentions of these protagonists, I focus on some problems confronting both sides of the debate. Specifically, I explore the argument that both positions involve reductionism. The radical position attempts to reduce individual factors to social factors and the moderate position attempts to reduce social factors to individual factors. I consider the effects of these

reductionist stances on both parties' attempts to explain the nature of social epistemology.

The second disagreement concerns whether social epistemology is a descriptive or normative discipline. Fuller's work suggests that social epistemology is both descriptive and normative. However, I explore how his account of a normative social epistemology provides arguably the strongest argument for identifying social epistemology with social sciences rather than philosophy and consequently draws stronger criticism from moderate social epistemologists. Fuller challenges the traditional conception of normativity because it was formulated mainly to evaluate the beliefs of individuals. He contends that normativity in social epistemology arises solely from "shared social practices" and is specifically meant to direct and change the actions of people towards the realization of their shared interests. He argues that social epistemology offers a "realistic and informative" conception of normativity that takes into consideration "the interest that informs the epistemological investigation" (Fuller, 1988, p. 275).

However, moderate social epistemologists contend that the normative concerns in traditional epistemology invariably continue in social epistemology because the same goals guide all epistemological investigations such as explaining the phenomenon of knowledge, establishing normative criteria for knowledge attainment, and refuting scepticism. Specifically, I discuss Kornblith's contention that "the suggestion that normative standards that apply to knowledge claims arise only out of shared social practices is not clearly true". For him, while normative commitments such as the necessity of asking for and giving reasons may be closely tied with some social practices, there are normative demands that are independent of those social practices. The natural human curiosity to know and be disposed towards the attainment of truth and avoidance of errors need not be dependent on social practices (Kornblith, 2002, pp. 92-93). In addition, I discuss his contention that the social dimensions of knowledge must be evaluated exactly the way that individual factors are evaluated- with the attainment of truth and avoidance of errors as the goal.

In my assessment of this disagreement, I discuss how Fuller's radical position is confronted with the problem of relativism based on his arguments that social interests must be factored into the conceptualization of "normativity". This is because each society has different social interests or what Wittgenstein rightly referred to as different "forms of life" that members will defend as correct. I also discuss Sandra Harding's challenge to both moderate and radical positions on the ground that concentration on both the individual and social factors (to formulate the concept of normativity) do not constitute the proper focus of social epistemology. Rather, she contends that only a "standpoint epistemology" can provide a road map for epistemology (2005, p. 219).

The third disagreement concerns how both sides play out over the issue of whether social epistemology should be viewed as part of the *a priori* discipline of philosophy, or a more empirical study which belongs with sociology, anthropology, or psychology. I discuss how Fuller wavers between two ideas: (i) that social epistemology is essentially a descriptive enterprise characterised by the empirical study of how knowledge is produced and utilized in society and (ii) that it is a normative enterprise that derives its normativity from science. Having outlined these considerations, I argue that both views are unsuccessful. Moderate social epistemologists such as Kornblith arguably want to defend the autonomy of philosophy and present epistemological investigations as essentially characterised by a first-person approach. Having outlined this view, I will critique it in the light of contemporary cognitive practice that favours an interdisciplinary approach to issues.

In section three, I turn to Dewey and articulate how his naturalist explanation of the development of human knowledge from the level of individual (primary experience) to the collective or communal level (secondary experience), offers an account of how the individual and the social play equally important roles in the generation of human knowledge, and that neither is reducible to the other. I articulate how his conceptions of inquiry (as a collaborative social activity) and "community of inquirers", further emphasize the indispensability of these two factors. Moreover, I discuss how he uses the scientific theory of evolution to

explain that there are general human problems and interests (such as the need to cope with changing environment) and that attempts to solve these general problems led to inquiries about knowledge. I discuss how he emphasised two points; (i) that inquiries are socially regulated activities and (ii) that knowledge is a social instrument.

Furthermore, I explain how Dewey's presentation of the processes of belief formation and retention, as a single continuum, erases the traditional boundaries between philosophy and cognitive fields such as psychology, sociology, biology and consequently opens up philosophical discussions about human knowledge to an interdisciplinary approach while its philosophical background is preserved. Secondly and more importantly, I discuss how Dewey's position, (the identification of some "general human problems or interests", the recognition that inquiry is a collaborative approach towards solving these problems and that whatever is "instrumental" in solving these problems is knowledge), offers an account of normativity that arguably is not relative to specific social contexts.

I end the chapter by noting the way in which Dewey's social and empirical conception of human mind, his 'esthetic' approach to human problem-solving and his naturalist position on culture (cultural naturalism) broaden out the traditional purview and concerns of epistemology in a valuable way.

5.1 The nature of traditional epistemology: an over-view

In this section, I recall some of the most important features of "traditional epistemology" that we have elaborated in chapter 3. Traditional epistemologists have shown a keen interest in the phenomenon of knowledge in a way that is described as epistemic- a way that purports to reflect objectively how the world is. For instance, if I make a claim that "there is a beautiful golden table in my room", this claim is a belief that can be established as either true or false. Making a claim or holding a belief, is regarded as the first step towards the establishment of knowledge. For my claim "there is a table in my room" to be established as true, there must be a world where there is a table, a room, where there is an object

called “gold” from which the concept of golden is derived, and so on, which the claimant can know. The world is the object of knowledge. Consequently, for a belief to become established as knowledge, it must reflect exactly what obtains in the world (must be true) and the believer must have evidence (justification) that the belief is true or be in the appropriate causal relation with the world. It is in this regard that “knowledge” in traditional epistemology has been described as justified true belief.

Traditional epistemologists have noted that our mechanisms for the formation of beliefs (such as the senses) and the mechanisms for justification of beliefs (such as human inferential skills, arguments, and sources of evidence such as memory and testimony), are often inaccurate. They have also noted that if there is no way of differentiating our accurate claims about the world from the inaccurate ones, the sceptical claim that the attainment of knowledge is not possible will become justified. Consequently, they are particularly interested in establishing a notion of justification that can enhance the realization of the goals of epistemology. These goals include establishing a practice that can guarantee the attainment of truth and avoidance of error.

In addition, traditional epistemologists are conscious of the fact that human (self) interests may influence the process of justification. Consequently, they have made a distinction between “epistemic” (or objective justification) and non-epistemic justification. By epistemic or objective justification, they usually have in mind the practice of establishing propositions that reflect some state of affairs in the world. “Objectivity” in this sense, is defined in terms of preventing the interests or biases of the claimant or the interests of the community in which she resides from influencing the processes and outcomes of justification.¹¹⁰ Consequently, it is believed that when a piece of evidence for a claim is insulated from the influence of personal interests, it enhances objective and epistemic justification. On the

¹¹⁰ This sense of ‘objectivity’ relates to questions about propositions, reality and truth and is one of the most fundamental issues in traditional epistemology. There are others. For instance, the concept of objectivity in ethics is usually considered to be wider in meaning and applications.

other hand, interest-based justifications are often regarded as subjective and consequently non-epistemic.

Moreover, in traditional epistemology, philosophical theories of knowledge are regarded as distinct from discussions about knowledge in closely related fields such as psychology and sociology or anthropology. Epistemological investigations can and do begin with formation of beliefs, a concern that epistemologists share with either empirical or behavioural psychology. However, the primary focus of epistemology is the validation of beliefs. It is in this sense that it is regarded essentially as a normative enterprise. This is regarded as the factor differentiating it from sociology, anthropology and natural sciences that are regarded as descriptive enterprises.

More generally, traditional epistemologists admit that in many fields, people are interested in acquiring knowledge. But only epistemologists are interested in what it is for something to count as knowledge. Consequently, these general questions about knowledge that epistemologists are keenly interested in, are regarded as more fundamental than specific questions that are raised in fields. This general approach to knowledge is to be pursued (at best), the argument goes, through methodologies such as analysis, intuitive reasoning, and dialectical argument. These are the methodologies that are supposed to transcend the methodologies of the specific disciplines.

Having briefly outlined the “basics” of traditional epistemology, I will now turn to examine scholars’ views about what “social epistemology” is. The focus will be on whether the latter offers a new dimension or an expansion of the former, or an entirely new field.

5.2 The nature of social epistemology

In this section, I discuss in detail the differences between the radical and moderate positions. I start by discussing what these protagonists mean by the term “social”. I then move deeper to explore differences that I take to be more fundamental: differences in their positions on the nature of knowledge, justification,

normativity, objectivity, scepticism, and the relationship between epistemology and other fields such as sociology and anthropology. Several questions will provide a road-map for this exploration. Is social epistemology contrasted with or continuous with “traditional epistemology”? If it is continuous, why a different name? Are *a priori* philosophical methods appropriate for social epistemology or only empirical methods? Are there differences between the goals of traditional epistemology and the goals of social epistemology? I will start the discussion with the radical social epistemologists.

5.2.1 Articulating the radical conception of the “social” nature of social epistemology

Social epistemology is often described as a discipline that sees knowledge as a social phenomenon. By social phenomenon, it is usually meant that knowledge, like language and games, cannot be privatised. In his critique of (traditional) epistemology and philosophy of science which he regards as the two branches of philosophy devoted to the nature of knowledge, Fuller writes,

... Philosophers treat the various knowledge states and processes as properties of individuals operating in a social vacuum. They often seem to think that any correct account of individual knowledge can be, ipso facto, generalized as the correct account of social knowledge. For example, the assertibility conditions for a scientific claim are typically defined in terms of the evidential relation that the knower stands to the known, without taking into account the epistemic states of other knowers whose relations to one another and the known would greatly influence the assertibility of the scientific claim (Fuller, 1988, p. xii).

Again, he writes,

... Epistemologists... assume that the best explanation for why a cognitive community officially treats a given claim as knowledge is that most of the community’s members believe the claim. However, both inferences greatly underestimate the influence exercised by each member’s expectations about what is appropriate to assert in his cognitive community, as well as each member’s willingness to discount his own personal beliefs and conform to these canonical expectations –if only as a means of maintaining his good standing in the cognitive community. In short, then, in my own view epistemic judgement has much of the character of identifying and anticipating trends in the stock market (Fuller, 1988, p. xiii).

There are two ways one can explain Fuller's definition of the "social" nature of epistemology: at the level of belief formation and at the level of justification or belief retention. At the level of belief-formation, Fuller admits that there are processes that involve some mechanisms that individuals are endowed with, such as the senses, brain and other psychological endowments. These mechanisms play important roles both in generating beliefs and providing evidence for their validation. However, he contends that those individual factors cannot be utilised without social mechanisms such as the use of language and concepts which are generated and passed from generation to generation through social interactions. Fuller's contention was succinctly presented by Kitcher when he writes,

Both in our abstract thinking and in our perceptual experience, the conclusions we draw depend on the conceptual repertoire that we employ and on the habits for reaching or inhibiting belief in which we have been trained. Early absorption of the lore of our societies affects us even at those points at which we appear most able to take our epistemic lives into our own hands (Kitcher, 1994, p. 112).

Kitcher's point is that our perception and even some of our experiences that are usually acknowledged as "private" such as our thoughts, are dependent on social factors, for instance, language, concepts and symbols. For instance, when I see two objects running and I identified them as a tiger and a goat, perceiving them and reporting what they were doing, depend on what society has conceptually established as "tiger", "goat", "running", "walking" and so on.

The second way of explaining Fuller's notion of "social" is at the level of validation or verification of knowledge-claims, Fuller sees these processes also as ultimately social. Again, language is indispensable- the concepts of true, false, belief, justified and so on, are "social legacies" bestowed on individuals. In addition, there are rules that are socially established to guide knowledge production. There are social organizations set up in social contexts to monitor the applications of these rules and determine the acceptability of claims before they can become knowledge. The indispensability of institutions such as peer-review panels (among academics, bodies or professional groups for physicists, medical practitioners and so on) in the validation and acceptance of knowledge arguably gives support to Fuller's stance. All claims endorsed as knowledge by these institutions are added to the

body of community or collective knowledge. These institutions have powers to review or revoke previously endorsed claims.

Perhaps Fuller's most radical claim is that, about a claim that a community endorses as knowledge, most of its members need not accept the claim. This claim seems to be corroborated if we consider the ratio of scientists in a community (and the authority they wield) with many non-scientific members, most of which are not aware or do not understand most of what the scientists are saying but still accept and abide by their scientific claims. Consequently, Fuller contends that an epistemology cannot be regarded as "social" on the basis that we can put together all correct accounts of individual knowledge and generalize them as the correct account of social knowledge. How strong is this claim?

Dave Elder-Vass agrees with Fuller that socially produced knowledge need not be accepted by all members of the community (as the example of the scientists and non-scientists members of the community has shown). However, he argues about the indispensability of the role of non-scientific members in the community in terms of disseminating the opinion of the experts widely "to become effective" (Elder-Vass, 2012, p. 227). While one may agree with Elder-Vass that in some cases such as the outbreak of epidemics such as cholera, prompt and accurate dissemination of information and instructions from the health experts by individuals, government agencies and organizations is vitally important in curbing the health hazard, there is no role for non-experts in the production of scientific knowledge. Elder-Vass clearly misses Fuller's point.

However, he challenges Fuller's position again by arguing that within a broad cognitive community, there are "clusters of epistemic circles". For instance, within a broad association of medical practitioners, there are circles of doctors, radiologists, nurses, dentists, optometrists and so on, working within different paradigms which often result in paradigm conflicts (Elder-Vass, 2012, p. 227). What is more relevant to our present purposes is the need for an overall coherence of knowledge produced by the cognitive community that cannot be realised unless objections raised at the individual or specific paradigm level are

responded to. Consequently, Elder-Vass rejects Fuller's claim that knowledge can be socially produced independently of individual account of knowledge.

From Fuller's and Kitcher's explanation of the "social", it is notable that their emphasis is on the presentation of social epistemology as a contrast to traditional epistemology. For them, traditional epistemology is an *individualistic epistemology* on the ground that it concentrates only on individuals' perceptual experience, ability to reason or make inferences (Kitcher, 1994, p. 111). In his emphasis on the indispensability of social interaction in knowledge attainment and rejection of any epistemology that fails to acknowledge this fact, Fuller pejoratively identifies the methodological approach of traditional epistemology with the Cartesian gesture of "withdrawing from all social intercourse as a means of getting into the right frame of mind for posing foundational questions about the nature of knowledge" (Fuller, 1988, p. 3). I now turn to explain *how* radical social epistemologists believe that social epistemology can focus solely on social factors.

5.2.1.1 Social factors as constituting the sole focus of social epistemology

There is agreement among all social epistemologists that a theory of knowledge that investigates only the mechanisms of belief production and retention which are located entirely within individuals cannot be adequate. What is the major point of disagreement between social epistemologists? It is arguable that the position of social epistemologists such as Fuller and Kitcher is stronger than merely advocating for the inclusion of social factors in the theories about knowledge. Their contention is that social epistemologists can concentrate solely on social factors and still arrive at their goals. There is arguably a radical shift from the traditional conception of epistemology in this position.

In explaining this shift, I take a conception of knowledge that Schmitt describes as the "strong programme" in sociology of knowledge as providing helpful insights. According to this view, some works on the social dimensions of knowledge in sociology have offered arguments that are strong enough to prompt epistemologists "to take seriously the idea that knowledge is a matter of

consensus or accordance with a multiplicity of perspectives.¹¹¹ What is suggested is that, rather than seeing knowledge as emerging from individuals (from their rational thoughts, imagination, and curiosity that lead to believing and eventually knowing states), epistemologists should focus mainly on social factors and conditions such as economic, social and political interests that cause knowledge. Equally important is the methodological reliance on shared paradigms.

It is arguable that Fuller also subscribes to this “strong programme” in his argument against traditional epistemology. According to him, traditional epistemologists focused on individual factors based on the wrong assumption that “a feature of the knowledge enterprise that appears primarily at the level of social interaction is, ipso facto, reproduced (by some means or other) as a feature of the minds of the individuals engaged in the interaction” (Fuller, 1988, p. xiii). He claims the feature of knowledge that appears after social interactions is different from what obtains at the level of individuals. A socially produced knowledge, according to him, will reflect community-wide interests rather than the interest of individuals.

Kitcher also subscribes to this “strong programme” when he writes that,

The processes that underlie the formation of the beliefs are types approved as knowledge-generating within the community (Kitcher, 1994, p. 117).

In Kitcher’s conception of social epistemology, the classical picture of an individual epistemic agent who is subjecting every belief to rigorous epistemic doubt to arrive at an indubitable foundation upon which other structures of knowledge can be built, seems to have been rejected. Rather, knowledge production is a communal or collective affair.

The plausibility of the recommendation from this “strong programme” depends on the credibility of the conception of what society is. Subscribers to the strong

¹¹¹ Schmitt cites the works of Barnes and Harding on how “social interests interfere with methods directed toward truth or empirical adequacy” and which warrant the proposal that knowledge should be conceived not as *belief with methods that aim at truth* but instead “as belief in accordance with social interests” (Schmitt, 1994, pp. 3-4).

programme usually argue that society is not a simple outgrowth of individual experience. Fuller, for instance, argues that although books, artworks and other textually and symbolically coded items emanate from distinct human cognitive efforts, *they have a peculiar ontological status of their own*.¹¹² Similarly, concepts or “social facts” such as “collective representation”, “institutionalised beliefs”, “community ideologies”, “group testimony” and “group mind” are “emergent” entities, but are distinct and distinguishable from the individual experiences from which they emerged.

Take for instance, Fuller’s idea of “collective representation”, which he regards as a development of Durkheim’s notion of the concept. For him,

Such an entity arises not when everyone has the same beliefs, nor even when everyone believes that a belief has been accepted by the group; rather, it arises when everyone tacitly agrees to express whatever they may happen to believe in terms of specific linguistic and other symbolic practices (Fuller, 1988, p. 54).

Hummon defends this conceptualization of society when conducting research on community ideology among some American communities. He argues that the research offers evidence “to conceive a community perspective as part of a shared tradition rather than a simple “outgrowth” of individual experience” (1990, p. 196). For him, community background shapes community preferences through socialization and that these processes usually result into some kind of “community imagery”. Such imageries include *expressions of collectivity* such as “group mind” and “communal beliefs”.¹¹³

¹¹² In *Social Epistemology*, Fuller explores the possibility of strengthening the thought experiment on World Three presented in Popper’s *Epistemology without a Knowing Subject*. This is an experiment that considers the possibility of reconstructing the human world without human beings. It considers the possibility of aliens (Martians) reconstructing human culture “by developing a linguistic competence in a way that does not involve actually interacting with humans”. Fuller sees this project as laudable; carving out a metaphysical space for objective knowledge. However, he considers making this experiment more successful by “reconstructing” Bloor’s sociological construal of World Three (Fuller, 1988, pp. 51-61).

¹¹³ I will attend to this argument in the latter part of this chapter and discuss how it involves the debate between the summativists and the anti-summativists.

Consequently, one can say that subscribers to the strong programme offer top-down analyses of society. For Fuller, social epistemology should embrace the strong programme in sociology to realize its established goals. We now turn to the conception of these goals.

5.2.1.2 The radical position and the goal(s) of social epistemology

For Fuller, “epistemology is inherently a sociological activity” (1988, p. 9). He explains this claim in two ways that he argues are connected. The first is that social epistemologists focus on social activities (social factors) that are concerned with the production of knowledge. We have discussed this point at length in the previous sub-section. The second explanation is that the field is sociological in the sense that it is characterised by certain “cognitive pursuits” that are meant to improve societies. Rather than knowledge being regarded as an abstract or theoretical phenomenon, it is practical. For him, traditional epistemologists missed this because they treated cognitive pursuits and their social organization as if they were two independent entities (1988, p. 9). It is in this sense that he contends that the goal of epistemology is the social organization of knowledge (1988, p. 5).

He further states,

[T]he social epistemologist would like to be able to show how the products of our cognitive pursuits are affected by changing the social relations in which the knowledge producers stand to one another. As a result, the social epistemologist is a policy maker (Fuller, 1988, p. 3).

Fuller’s point is that social epistemology is social engineering. According to this view, knowledge is, in Dewey’s coinage, “an instrument” for public policy. The practical impacts of knowledge in society define the adequacy of knowledge by contrast to traditional epistemology exemplified by Descartes who tied the adequacy of knowing to *clarity and certainty of thinking* (Fuller, 1988, p. 3). For Fuller, social epistemology is meant to be “a radical critique and replacement of the epistemological enterprise, especially of its classical task of laying down interest-invariant foundations for knowledge” (1988, p. 10).

From Fuller's explanation of social epistemology as a "sociological activity" both in terms of focus on social organization and social cognitive pursuits, two further characterizations of social epistemology are identifiable: descriptive and normative. I discuss these two descriptions and argue that he struggles to define and deal with the implications of a notion of normativity that poses a radical challenge to the traditional notions of normativity.

5.2.1.3 The radical social epistemology and the (new) conception of normativity

On the issue of normativity, Fuller pursues two approaches. In the first, he challenges the notion that philosophy has monopoly over the determination of what criteria constitute the necessary and sufficient conditions for knowledge acquisition. According to him,

Sociologists have long suspected that philosophical talk about how knowledge "ought" to be produced is motivated by a desire to speak with an authority that lies beyond the check of the empirical disciplines (Fuller, 1988, p. 17).

He contends that philosophers' presumed prerogative over norms about knowledge and the idea that epistemology is a special discipline that concerns itself with knowledge independently of science, were significantly refuted by Quine and Rorty. For him, Quine's project of naturalizing epistemology succeeded in showing that epistemology belongs to some aspects of behavioural psychology and neurophysiology that are concerned with the causal origin of human responses to stimuli. In addition, he contends that Rorty admitted that the business of legitimizing knowledge claims belongs to humanistic disciplines that are traditionally devoted to cultural criticism.¹¹⁴ On both accounts, "the epistemologist ends his normative ways and thereby dissolves the boundaries that currently exist between his work and that of historian, psychologist, and

¹¹⁴ While "cultural criticism" rightly may be thought of as normative, there is an interpretation of Rorty's position (as seeing epistemology coming to an end) to contend with. Whether this interpretation is true or not, one problem with taking Rorty's path is that while Rorty arguably rejects the view of the traditional epistemologists that through some objective normative criteria, we can establish links between propositions, truth and reality, traditional epistemologists on the other hand reject Rorty's idea of cultural criticism as normative and his contention that epistemology should be replaced with cultural or literary criticism. This debate is beyond the scope of this section.

sociologist” (Fuller, 1988, pp. 17-18). Fuller argues that by dividing the labor of justification in this manner, “the need for a special discipline of epistemology is eliminated” and “the deepest epistemological problem is conquered” (1988, p. 18). On this view, the question whether social epistemology should be descriptive or normative is irrelevant.

The second approach in Fuller’s work is towards the reconceptualization of the concept of “normativity” without its philosophical presumptions. According to him,

Epistemologists have presumed an excessively restricted understanding of “normative” which manages to include the decisions that individual scientists ought to make for regulating their own research practices in idealized settings, yet exclude the decisions that policymakers ought to make for regulating research practices of the scientific community as a whole in a more realistic setting (Fuller, 1988, p. 275).

Fuller’s point is that the concept of normativity in traditional epistemology may be considered appropriate (as a form of “house-cleaning”) for an individualistic epistemology but not for a social epistemology that has a wider purview in terms of holistic or collaborative interdisciplinary investigations. This is a further development from his proposal previously considered concerning the need to erase the “artificially” erected boundaries between epistemology (philosophy) and other cognitive fields that deal with knowledge.

Furthermore, he argues that the traditional conception of normativity is built around two factors that render the concept unrealistic and uninteresting. First is the idea that there could be an ideal epistemic agent who is completely stripped of biases and personal interests in her pursuit of knowledge. He sees this as a myth or an “idealization”, a description that has a pejorative meaning comparable to Dewey’s description of a “spectator investigator”. Like feminist theorists such as Harding (1998) and Haraway (1991), he describes the traditional conception of “objective justification” as “a view from nowhere”. According to him, the conception of this sense of “normative” in classical epistemology can be attributed to an idealist bias according to which there is agreement that knowledge is propositional but refusal to “take the material instantiation of a proposition”

(Fuller, 1988, p. 275). What he meant by “material instantiation of a proposition” is that for a proposition to be true, there must be practical or material implications. Thus, for him, for a conception of justification and objectivity to be realistic and informative, the interest that informs the epistemological investigation must be factored into it. For him, “much of what ordinarily passes as signs of objectivity (such as absence of individual biases in theorization or justification), may be understood as the product of normatively constrained social action” (Fuller, 1988, p. 51).

The second factor upon which the traditional conception of normativity is built, according to Fuller, is a belief-theory of knowledge. Given that holding a belief is regarded as necessary condition for knowledge, the conceptualization of normativity in traditional epistemology is meant solely for evaluating individual beliefs. However, Fuller contends that this conception of “individual belief” excludes a wide range of collective human actions and other important institutionalized activities such as governmental policies which are not *explicitly* covered by the term “individual beliefs”. Alternatively, Fuller proposes a sense of epistemological “normativity judgements” that is based on the purpose of *directing people’s actions rather than merely evaluating their beliefs*. His point is that changing the course of people’s actions is normative, in the sense that there are goals and norms to guide towards their attainment. It is in this sense that he sees a social epistemologist as a policy maker or a social engineer.

In articulating this new conception of normativity, Fuller argues that ethics provides two standpoints from which normative judgements can be made: Firstly, before someone acts so as to direct his action. Secondly, after someone acts, so as to evaluate his action (Fuller, 1988, p. 24). Social epistemology, according to Fuller, adopts the first standpoint. By choosing a model of normativity where the focus is essentially on moral actions rather than beliefs, Fuller hopes to circumvent the traditional belief-theory of knowledge. By locating the preoccupation of social epistemologists in the first standpoint of normativity provided by ethics (where the focus is more on prescription rather than evaluation of actions), Fuller hopes

to identify with Karl Marx on his maxim that “changing the world” is a greater task for philosophers than interpreting it (Fuller, 1988, p. 24).

The similarity between Fuller’s position and Dewey’s naturalist epistemology is notable in the sense that both advocate for “practical epistemology” or “instrumental” conception of knowledge. Dewey presents knowledge in terms of practical activities or what he calls “action-doing”. He also rejects the traditional notion of justification in terms of preference for arguments that are more logical than their rivals and replaces the approach with the conception of justification in terms of choosing between hypothesis that are most likely to be instrumental in turning around a recalcitrant or precarious situation.

We can summarise the uniqueness in Fuller’s conception of normativity in two ways. He contends that the concept of normativity that is developed around prescriptions on human actions is not only as legitimate as the conception of normativity built on evaluation of beliefs, it is more realistic. It is more realistic because it involves human overt actions and human interests and based on the argument that the quest for knowledge by the humans always presupposes some human interests and purposes. The realization of these purposes makes validation more real and easily discernible than what obtains in the traditional conception of normativity that is conceptualized around the notions of ideal rational knower and ideal investigations.

For Fuller, the only way to give philosophers’ propensity for idealization some sociological credibility is to treat “idealization as an elliptical form of social engineering” (1988, p. 24).¹¹⁵ Thus, for Fuller,

when philosophers speak of the ideal rational knower, they too may be suggesting that our judgements of knowledge production should be taken in a more restricted social setting, with the philosopher’s preferred Method functioning as partial instructions for creating that setting (Fuller, 1988, p. 25).

The suggestion here is that philosophers’ ideal rational knower can be interpreted as a kind of strategy or practice meant to establish certain facts about knowledge

¹¹⁵ Fuller acknowledges Francis Bacon as the ultimate source of this strategy (1988, p. 24).

in ideal or 'sampled' situations from which generalizations can be made. Interpreted in this way, normativity (in terms of idealizations) is regulatory in terms of directing epistemologists on how to conduct their research, have their findings endorsed as knowledge and so on. However, for Fuller, interpreting the traditional conception of normativity in this way is still problematic since factoring the purpose of the norms into the concept of normativity, the "philosophers' idealizations" will only provide "partial instructions" for social engineering.¹¹⁶

Another important point of contrast is contained in Fuller's argument that social epistemology derives its concept of normativity from what obtains in science. According to this view, in actual scientific practice, norms are derived or selected from the social organization of science. He calls this the "norm of coordination" and argues that it reflects the interdependent nature of scientific research (Fuller, 1988, p. 269). For example, there is an increasing role that deference to expert opinion plays in science. He explains how this is actuated by the growing specialization that "expands the region of incompetence for any given individual". Consequently, an individual ends up being able to test fewer of the claims on which his own decisions are forced to rely (Fuller, 1988, p. 269). He compares this "social" selection of norms in science with normative activities in philosophy where *logical structures of arguments are inspected and experiments of one's colleagues are replicated*. (Fuller, 1988, p. 268). For Fuller, while normativity in science (and consequently in social epistemology) is systemic, normativity in traditional epistemology is characterised by what he pejoratively calls "the free pursuit of knowledge" (Fuller, 1988, p. 270). He thinks that the absence of a universal or systemic approach to normativity in philosophy renders the concept problematic. On the systemic nature of normativity in science, Fuller writes:

¹¹⁶ However, Fuller cites other problems that may contribute to the inadequacy of philosophers' idealizations playing the proper role of social engineering. One such problem he debates at length is the tendency of philosophers to regard their "methodology" as "self-certifying". This is a problem that he sees as militating against attempts to reach optimal knowledge production (1988, pp. 25-26).

For if what makes a norm “normative” is its possibility to be enforced”, then a necessary ingredient in the rational selection of a scientific norm is that the scientific community has the resources for enforcing the norm (Fuller, 1988, p.268).

According to this view, social factors play decisive roles in belief formation and retention processes. Social interests also determine the choice of method and direction of investigation. One of the advantages of Fuller’s new conception of normativity noted by Thomas Nickles, is that social epistemologists can legitimately raise questions about how and to what extent the methodological proposals of philosophers are socially and psychologically possible (Nickles, 1988, p. ix).

5.2.1.4 The Radical position and the conception of social epistemology as a sociological field

In his *Social Epistemology*, I argue that Fuller wavers between presenting social epistemology as a thorough-going non-normative or descriptive sociological field and an enterprise with a revised notion of normativity. However, his tactical approaches such as redefining the concepts of knowledge and normativity, replacing the methods of traditional epistemology with empirical approaches peculiar to social sciences and recommending social factors as the sole focus of social epistemology, are meant to render social epistemology ultimately an extension of sociological investigation. He defines this tactical approach as “sociologizing traditional epistemology” (Fuller, 1988, p. 269). At this point, I briefly outline this “nonnormative” version.

Fuller writes:

[T]he key issues for me concern a fairly literal sense of “knowledge production” which includes how certain linguistic artifacts (“texts”) become certified as knowledge; the possible circulation patterns of these artifacts (especially how these “artifacts” are used to produce other such artifacts, as well as artifacts that have political and cultural consequences); and the production of certain attitudes on the part of the producers about the nature of the entire knowledge enterprise (such as the belief that it “progresses”) (Fuller, 1988, pp. xi-xii).

From this view, Fuller compares the process of knowledge production and justification with the production of artifacts such as tools and appliances. Just as

the worthiness of a tool lies in its usefulness, the justification of a knowledge claim is determined by the consequences of holding it as justified. In this sense, Fuller's nonnormative social epistemology contrasts with traditional epistemology in several ways. Firstly, the idea that epistemologists are preoccupied with a kind of general knowledge abstracted from all the notions of knowledge studied by specific disciplines, is rejected. For Fuller, there is no significant difference between knowledge that an epistemologist is discussing and what a policy maker or a biologist is dealing with. In both cases, knowledge is any rationally organized information that commands the consideration of members of some relevant cognitive community. Fuller's point is that the production of knowledge is not different from the way other material commodities are produced, distributed and utilized in society and consequently the methodological approach in this version of epistemology is not different from empirical investigations that characterise disciplines such as political economy or technology- where what is produced is based on what is needed.

Another peculiarity of Fuller's nonnormative sociologized epistemology is that traditional epistemological worries about "whether our beliefs in an external world are veridical or justified" are now irrelevant (Fuller, 1988, p. xi). What is important is, from Fuller's view, is what science tells us about our beliefs and their connection with the physical world. This is because social epistemology as a subfield in science, derives its foundation from the practice, norms and paradigms within science.

In summary, Fuller and Kitcher present social epistemology as a new field that is closer to sociology than philosophy. This position is called "radical" because it argues that social factors are ultimate in belief-formulation and retention. More important, the position rejects some of the goals of traditional epistemology such as refuting scepticism that contends that the attainment of knowledge is impossible and providing a foundation for scientific knowledge in a way that amplifies the autonomy of epistemology. Most importantly, the focus on *attitudes toward propositions* is replaced with a focus on human actions. The question is, is the radical position successful? I now critique the radical position.

5.2.1.5 Critique of radical social epistemology

The critique of the radical position is in two phases. Firstly, I discuss how the radical position defended by Fuller and Kitcher invites the problem of relativism. I see this problem as the most serious problem confronting this position. In the second phase, I turn to the moderate position and explore how it offers further critique of the radical position. I focus on how moderate social epistemologists have argued that scholars such as Fuller and Kitcher have exaggerated the importance or role of social factors in epistemology. I also examine the objections they have raised against Fuller's conception of normativity and the notion that social epistemology is ultimately a sociological enterprise. I start with the problem of relativism.

5.2.1.5.1 Radical social epistemology and the problem of relativism

One objection against the presentation of social epistemology by Fuller and Kitcher is that if social factors or interests become the primary focus of social epistemology (or epistemology generally), this will unavoidably introduce different and incompatible social contexts into considerations about knowledge. Each social context will be characterised by different practices and parameters and this will actuate different notions of knowledge and theories of justification. The outcome will be different societies and other groups (e.g. disciplines) having their own independent versions of truth, knowledge, and justification.

Fuller noted this challenge of relativism in a position he credited to both Larry Laudan and Karl Mannheim. Laudan and Mannheim admitted that "sociological accounts of our cognitive pursuits are appropriate only when those pursuits fail by universally acceptable standards of reality" (Fuller, 1988, p. 4). Laudan's assumption is that philosophy is committed to defining a single, all-encompassing set of rational standards- the goal of philosophical research. In this sense, a

sociological account of knowledge, with its relativised standard of rationality, is a poor man's epistemology.¹¹⁷

Kitcher also admits the possibility of relativism in this version of social epistemology when he writes that,

One route that social epistemology can take at this juncture is to adopt a full-blooded relativism, averring that the types of entities that can count as items of knowledge are as diverse as the "forms of life" in which they are embedded, and that the standards of knowledge are simply those of social acceptance. It is enough that an instrument, diagram, or text is "reproduced and circulated," or that it forms "part of an enduring network" within a society-under such conditions it counts as an item of knowledge within that society. There are apparent losses in settling for relativism-most obviously, the possibility of drawing a distinction between what is current in a society and what is genuine knowledge (Kitcher, 1994, pp. 117-118).

Why should Fuller care about this problem of relativism? How serious is it? For instance, if social epistemology is a new field with its own goals, notion of normativity and methodologies different from traditional epistemology, then, can't Fuller argue that the problem of relativism is only relevant to a traditional epistemologist who is interested in conceptualizations such as absolute truth or universal knowledge? Is this response strong enough to establish that the charge of relativism begs the question against Fuller? I don't think so.

I think traditional epistemologists are interested in defining and understanding some basic notions such as knowledge and truth. This is the most fundamental among the goals of traditional epistemology. Other goals, such as proving that knowledge is attainable or that the sceptics can be refuted, are meaningful only after we have successfully defined and understood these concepts.¹¹⁸ I believe that if 'social epistemology' is to count as "epistemology", it must start from these

¹¹⁷ There are two routes to this argument. First, we can consider theories such as Utilitarianism and Kant's categorical imperatives as defining a single, all-encompassing set of rational standards and contend with the challenge about their all-encompassing nature. Alternatively, we can consider the conception of objectivity (as traditionally construed) as defining rational standards and contend with challenges such as offered by feminist philosophers that such senses of objectivity are themselves biased. The exploration of both routes is beyond the scope of this section.

¹¹⁸ The moral from *Meno* (the dialogue between Socrates and Meno) is that defining what knowledge is, is different from citing examples of knowledge. Fuller seems to have fallen into this trap by presenting the effectiveness of public policies as a proof that the attainment of knowledge circumvents the need to refute the sceptics who contend that knowledge attainment is impossible.

basic questions, or Fuller's argument that knowledge is important for *social engineering* will not make sense. The reason is that, defining or analysing basic concepts is a preliminary step expected in any analytical discourse. If social epistemologists such as Fuller and Kitcher take on these basic questions, it will be problematic to define knowledge and truth (for instance) as *whatever each society regards as knowledge or truth*.

As Kitcher rightly noted, one of the losses of relativism is that whatever is called knowledge, truth or justified, will be valid only relatively to a specific society or culture. Consequently, the concepts of context-independent truth, objectivity or validity will just disappear. If Fuller is right that the interests of a society determine what is regarded as "knowledge", "normative" and justified, we can envisage a more worrisome relativism in societies where there are significant differences among the interests of the comprising groups, ethnic or tribal affiliations and more importantly where one group is politically more powerful than the others.

A vivid picture of relativism based on inherent social differences is provided by Wittgenstein in his discussion of his language -game analogy and how it involves "forms of life" that are different from one culture to another. In his analogy of two cultures: in which members of one culture use propositions of physics in guiding their actions and members of the other culture use an oracle, Wittgenstein writes,

609. Supposing we met people who do not regard that as a telling reason. Now, how do we imagine this? Instead of the physicist, they consult an oracle. (And for that we consider them primitive.) Is it wrong for them to consult an oracle and be guided by it? - If we call this 'wrong' aren't we using our language-game as a base from which to combat theirs?

611. Where two principles really do meet which cannot be reconciled with one another, then each man declares the other a fool and heretic.

612. I said I would 'combat' the other man, - but wouldn't I give him reasons? Certainly; but how far do they go? At the end of reasons comes persuasion (Wittgenstein, 1969, pp. 609-616).

The lesson from Wittgenstein is that when we have two incompatible positions coming from two different forms of life, or practices from two different cultures, there is no rational or objective basis (independent of language-game in each

forms of life) for saying one is wrong and the other is correct. For him, to judge one form of life as better or superior, we must use the criteria in one form of life to judge the other and this for him is sheer prejudice. The question is, what is left for epistemology? Wittgenstein's reply is that understanding the differences inherent in different forms of life often in fact does go a long way in resolving conflicts. Two questions that are pertinent are: (i) could understanding of differences inherent in different cultures lead to the dissolution of cultural or social relativism? (ii) Is understanding the goal of epistemology?

However, one can object to Wittgenstein's position by arguing that although "understanding" our cultural differences is a kind of knowledge, it is not part of the primary objectives of epistemology. If it were understanding, it is arguable that the business of epistemology would have terminated at the level where different forms of beliefs are described or asserted. The primary goal is defining and understanding knowledge. This goal prompts the need to make a distinction between knowledge and belief on one hand and the conceptualizations of truth and justification, on the other hand.

However, the history of traditional epistemology has shown consistent interest in and preoccupation with the kind of truth that Wittgenstein called "unconditional"- a truth that is not relative to any individual, culture or social context. As rightly noted by Wilson, philosophers tend to suppose that "only one of the candidate paradigms treating a given phenomenon is correct... Hume did not just offer his account of causation as a logically or metaphysically possible alternative – he thought that it was the only viable such account..." (Wilson, 2014, p. 147). Philosophers such Stroud, Kim, Kornblith and Goldman have argued extensively that if the concept of normativity is taken out of epistemology, it loses its essential nature (Goldman, 1993b; Kim, 1994; Kornblith, 1994b; Stroud, 1985).

Radical social epistemologists are challenging the notion of unconditional or absolute truth that dominates traditional epistemology. Dewey also rejects this notion of truth. However, while radical social epistemologists are confronted with question how can social epistemology be regarded as a normative enterprise

when there is no non-contextualised rational basis for making a distinction between what is regarded as true and what a society regarded as accepted, Dewey's position identifies some fundamental bases, such as the need to solve some natural challenges that are similar in all social contexts. Again, while radical social epistemologists are confronted with the question on what basis can social epistemology be regarded as an epistemology when both are substantively dissimilar, Dewey's position identifies the differences between traditional epistemology and social epistemology, as well as some basis for seeing the latter as continuous with the former. This is what makes Dewey's theory of knowledge invaluable. I turn to discuss moderate social epistemology.

5.2.2 Articulating moderate social epistemology.

In this section I start the discussion by stating the concession of epistemologists such as Kornblith and Goldman, that traditional epistemology has been largely dominated by the focus on individuals and their attempts to use their cognitive endowments and abilities to establish the possibility of knowledge. I then discuss their accounts of the role of social factors in philosophical theories about knowledge. I argue that, while for Goldman, social factors necessarily must be included to widen the purview of traditional epistemology and make it adequate, for Kornblith, consideration of social factors has always been there. For him, traditional epistemologists only regard individual factors as primary while social factors are secondary. I discuss what he meant by these terms and link this with the point that both epistemologists hold social epistemology as continuous with traditional epistemology. This is a point that makes it reasonable to describe their position on social epistemology as moderate. I explore the argument that while both epistemologists favour interdisciplinary approaches to knowledge, a radical social epistemology (as presented by Fuller) is unacceptable to them. Put differently, I explore their continuation of a relatively distinct philosophical approach to knowledge within the framework of an interdisciplinary approach.

5.2.2.1 The role of social and individual factors in an “expanded” traditional epistemology

Kornblith and Goldman agree with the radical social epistemologist that traditional epistemology has paid more attention to individuals in their account of knowledge than social factors. Kornblith admits this when he writes that the focus of traditional epistemology

[H]as resulted primarily in an examination of perceptual and inferential mechanisms—ones which are located entirely within individuals, and ones which are typically investigated in ways which abstract away from their social setting. But the mechanisms of belief production and retention extend far beyond perceptual and inferential equipment located in individual heads, and include social structures and institutions which are equally appropriate objects of investigation.... And just as we need to examine our perceptual and inferential equipment against the background of the natural environment in which they operate, we also need to investigate these mechanisms against the background of the social environment in which they operate. Such investigations are straightforward extensions of the naturalistic project in epistemology (Kornblith, 1994a, p. 97).

Goldman also has this to say about the necessity of widening the scope of epistemology:

Epistemology has historically been preoccupied with individual knowers and their minds. This preoccupation has a plausible rationale. Knowers are individuals, and knowledge is generated by mental processes and lodged in the mind-brain.... But concentration on the individual to the exclusion of the social is inappropriate. The bulk of an adult’s world view is deeply indebted to her social world. It can largely be traced to social interactions, to influence exerted by other knowers, primarily through the vehicle of language. It is imperative, then, for epistemology to have a social dimension (Goldman, 1992, p. 179).

Goldman and Kornblith contend that, although traditional epistemology has been individualistic in its approach, it can develop a social dimension. For Kornblith, epistemologists should acknowledge the impacts of social mechanisms such as language, social structures, rules, and interactions of people on the formulation of their theories of knowledge. Specifically, these impacts are in two dimensions: how beliefs are formed and how they are retained. Consequently, these social factors and mechanisms such as the brain, the senses, and other psychological endowments which are peculiar to individuals, will now constitute the focus of

epistemology. Language is a social phenomenon in the sense of being a product of social interaction. Also, in the process of justifying beliefs, which Kornblith rightly describes as characterised by the practice of “giving and asking for reasons”, a community of inquirers with some socially established rule of engagements will also be acknowledged as indispensable (2002, p. 97).

Goldman gives a more detailed account of how traditional epistemology can qualify as social. For him, there are three types of social epistemology. Firstly, there is a type of social epistemology in terms of a “refurbished” traditional epistemology. Traditional epistemology becomes social when epistemologists re-introduce its long-neglected evidential source, namely: testimony, or the statements one hears (or read) from other persons. According to Goldman, “if another person testifies to the truth of P, a hearer acquires a new source of prima facie evidence for P” (2011, p. 13). He contends that the importance of testimony as an evidential source has gained ground in recent time. Goldman’s main point is that in recognizing testimony of others as a source of evidence (like other sources of evidence such as perception and reasoning), traditional epistemology will become social because it will involve interactions among a collection of people who influence one another in the processes of belief formation and retention. Secondly, there is a type of social epistemology, according to Goldman, that “takes group agents as its subject matter, collective entities that make doxastic choices or decisions”. Thirdly, there is a type of social epistemology that “takes epistemic systems” as its subject matter. An epistemic system “is a social system that houses a variety of procedures, institutions, and patterns of interpersonal influences that affect the epistemic outcomes of its members” (Goldman, 2011, p. 13). For the present purposes, I will focus on the first version of Goldman’s social epistemology.

The claim of Kornblith and Goldman appears to be a modest position when we compare it with Fuller’s. These epistemologists are drawing attention to the indispensability or equal importance of both individual-based factors and social factors. Their position challenges the radical position because it implies that epistemology is social all the way down. They argue that no matter how great the

influence of social phenomena on the process of belief formation, the existence of naturally (and non-socially) endowed native psychological equipment: the brain, the senses and other natural endowments that are used in the production of beliefs, will remain indispensable. These mechanisms are not reducible to social factors. More important, the reliability or otherwise of the non-social factors are equally indispensable in every attempt to evaluate or justify a claim to knowledge (Kornblith, 1994a, p. 101). Kornblith's point is that we can appeal to social and cultural differences when we are explaining the differences between how people observe rules of etiquette like greetings, table manners, nature of hospitality to strangers and so on, but differences in perceptual beliefs cannot be explained completely by social factors (1994a, p. 102). We have to appeal to differences in the functioning of individuals' perceptual apparatuses.

My take on this debate is that both Goldman and Kornblith disagree with Fuller's idea that social epistemology is a new field in social science. Both see social epistemology as an expansion of traditional epistemology. Kornblith's argument on the indispensability of the individual physiological equipment in belief formation is meant to preserve the focus of traditional epistemology. Goldman's quest to add the testimonies of others to the sources of beliefs is also to preserve this focus. The radical social epistemologists cannot do so without forfeiting their position. On the other hand, what I think moderate epistemologists need to prove wrong is Fuller's argument that, in respect of validation of knowledge, social factors are the only factors to be acknowledged. Consequently, we have a mutual disagreement concerning the nature of social epistemology. I now explore how disagreement between radical and moderate social epistemologists on the nature of normativity further complicates the understanding of the nature of social epistemology.

5.2.2.2 The moderate position and the critique of the conception of normativity in radical social epistemology

In our articulation of Fuller's position, it is noted how he wavers on whether social epistemology should be regarded strictly as a social and descriptive enterprise and

consequently needs no account of normativity or should be regarded as a normative enterprise with a different notion of normativity. In this section, I concentrate on his conception of social epistemology with a notion of normativity that is radically different from what obtains in traditional epistemology. This is because this reading of Fuller is more nuanced than his consideration of social epistemology as a purely descriptive enterprise.

Kornblith objects to Fuller's idea that the nature of normativity in social epistemology is different. He challenges Fuller's contention that the processes involved in the retention of beliefs are solely social. He buttresses his point by making a distinction between reflecting on one's beliefs (which he called individual metacognition) and reflecting on one's beliefs through engagement in the social practice of giving and asking for reasons (which he called social metacognition) (Kornblith, 2002, p. 70). Thus for Kornblith:

The suggestion that the normative standards that apply to knowledge claims arise only out of shared social practices, however, is not clearly true. While social practices may give rise to normative commitments that would not have existed without them, they may also simply reflect normative demands that exist independently of those practices...The institutions and practices reflect a social recognition of a pre-existing normative demand; they do not bring it into existence (Kornblith, 2002, pp. 92-93).

For Kornblith, we can locate some kind of normative appraisal at the level of individuals who are engaging the world with natural endowments such as the ability to perceive, think and make inferences. What we need to establish, his contention goes, is that our ability to think and make inferences is not ultimately dependent on social interactions. He seems to be challenging his opponents to imagine pre-social individuals who naturally were not capable of perceiving, thinking and making inferences; the level of crudeness and dangers of inaccuracy notwithstanding. Inferences are judgements and judgements are inseparable from some level of normativity. Consequently, for Kornblith, every epistemic judgement is dependent on individuals who are perceiving, thinking, and making inferences from these experiences.

Kornblith and Goldman contend that epistemological problems (such as perceptual relativity and infinite regress in the justification of beliefs) that motivate traditional epistemologists to investigate the reliability of individual factors (perceptual mechanisms, the human brain) that are involved in the formation and retention of beliefs, also motivate investigations into social factors or social dimensions of knowledge. One of these considerations is the attainment of truth and avoidance of errors in the process of knowledge acquisition which epistemologists hope to secure by examining all causal factors involved and thereby strengthen the established conditions that are necessary and sufficient for the attainment of knowledge. In any attempt to identify or weigh the epistemic worth of social factors in a theory of knowledge, Kornblith suggests two important questions that he thinks should provide a necessary guide:

First, one may ask whether the role which the identified social factor plays is conducive to the production of true belief. Second, assuming that the first question has been answered in the affirmative, one may ask whether the presence of the social factor itself has any special connection with the production of true belief. These are important questions for epistemologists to be asking, and they point in the direction of an important class of social explanations (Kornblith, 1994a, p. 103).

Kornblith's point is that the inclusion of social factors in the process of belief justification does not alter the evaluative processes that are established in traditional epistemology. The question how to justify our beliefs in an objective and impartial way is still the main concern. According to Kornblith, social epistemology shares this attribute with naturalized epistemology- both of them *investigate both mechanisms for belief production and retention* (1994a).

In his support of Kornblith's claim that the inclusion of social factors in epistemology does not alter the concern of epistemology in terms of avoidance of error, Goldman notes the "much-discussed problems of social evidence" in terms of "peer disagreements" (2011, p. 15). He sees this problem as a pointer to the fact that inconsistency and even irrationality arises in collective attitudes as much as in individual attitudes (Goldman, 2011, p. 17). Besides, Goldman contends that people (individuals) make epistemological and scientific breakthroughs even amid stiff opposition from their peers and social authorities. He cites Galileo's exploits

in natural science to underscore the point that successful individual epistemic investigators are the cornerstone upon which community knowledge is built (2011, pp. 31-32). This point seems to corroborate Laudan's view that social factors such as norms are generically traceable to contributions from some individuals that have become idealized over some time.

How adequate is Kornblith's and Goldman's response to Fuller's contention that evaluation of knowledge is solely social? Fuller argues that the conceptualization of norms that guide social epistemology is determined by social interests and its guidelines are administered by established social institutions. The use of public language in the expression of beliefs and in the practice of asking and giving reasons for holding beliefs also corroborates Fuller's claim. Kornblith and Goldman's objection is that the norms for determining how beliefs are retained, the rules about how language is used and the interests of the society are not self-generating- they cannot be formed or meaningfully understood without reference to individuals. From this point, their objection is that the argument that the processes for ratifying beliefs are solely social, is too strong. Their moderate claim seems to be fair enough; that the role of individuals in the formation and maintenance of norms for retention of beliefs is indispensable and irreducible. This claim rests on the ontological claim that individuals and their activities make up the community, the "social" and "social factors".

On this moderate claim, Kornblith's description of the importance and irreducibility of the role of individual epistemic agents in terms of "epistemic responsibility" is notable. He writes:

Although it is clearly true that beliefs are not freely chosen, the actions which an agent freely chose to perform may well affect the processes by which his beliefs are arrived at, and thus the beliefs themselves. It is thus that we may assess an agent, or an agent's character, by examining the process responsible for the presence of his beliefs just as we may evaluate an agent, or his character by examining the etiology of his actions (Kornblith, 1985, p. 121).

Kornblith's strategy lies in seeing the long processes of knowledge (from formation to retention of beliefs, starting from individuals and ending in the ratification by social institutions) as a continuum where a mistake or any epistemically "irresponsible act" of an individual can affect the entire processes. An error from some faulty perceptual mechanisms of an individual or some wrong calculations, may generate a false belief that goes unnoticed and is accepted as knowledge by ratifying institutions. Also, an individual epistemic agent may falsify his research and get away with it. All these instances point to the importance of individuals in the process of knowledge formation.

Lorraine Code corroborates Kornblith's claim when she contrasts the concept of "epistemic responsibility" with "mechanical" epistemic reliabilism to emphasise the active nature of individual knowers:

The concept of 'responsibility' can allow emphasis on the active nature of the knower/believer that the concept of 'reliability' cannot. In my view, a knower/believer has an important degree of choice with regard to modes of cognitive structuring and is accountable for these choices. A 'reliable' knower could simply be an accurate, but relatively passive, recorder of experience... A person can be judged responsible or irresponsible only if she/he is clearly to be regarded as an agent (in this case a cognitive agent) in the circumstances in question (Code, 1985, pp. 39-40).

Here, Lorraine Code agrees with Kornblith that it is contributions from individuals that establish and expand the horizon of knowledge. According to this view, there are decisions, methodological approaches, and practices that may be peculiar to individual knowers and which in the course of their successful applications become conventional models or standards which Code describes as "idealized settings".¹¹⁹ Rorty acknowledges these idealized settings and paradigms but argues that they are not static. His statement that "we shall not know where the real limits are unless we keep on hurling ourselves against apparent limits" (Rorty,

¹¹⁹ Lorraine Code often describes the laboratory and *a priori* conditions (usually regarded as necessary for objective knowledge in traditional epistemology) as idealized settings and contrasts them with diverse, contextualized and concrete engagements she often describes as "standpoints" or a "situated" approach (Code, 1985, 2006). Other feminists have emphasized this point of view, for instance, Sandra Harding (2005).

2010, p.527), arguably refers to individuals who are not taking what society presents as *ideal* for granted.¹²⁰

This argument, shared by Kornblith and Code, was noticed in Laudan's work by Fuller. According to Fuller, "Laudan thinks the main challenge to the sociology of knowledge is that the reasoning of the scientific community may be closer to an idealized standard of rationality than the sociologists are willing to admit" (Fuller, 1988, p. 268). In other words, social norms and normative institutions that sociologists are tagging as "solely social factors" independent of individuals, at one time are "ideals" of individuals that later became generally accepted as social norms and paradigms.

In his dismissal of Laudan's contention, Fuller argues that the formation, application and maintenance of norms in science is systemic. By this, he means that *norms in science developed as institutions*. In this sense, the idea of norms developing from individuals (which he sees as peculiar to philosophy) does not apply in science. He further distinguishes normativity in science from what obtains in philosophy by stating that what makes norms normative in science lies in the ability and the resources at the disposal of the scientific community to enforce them (Fuller, 1988, pp. 268-269).

How plausible is Fuller's response? I think he is right that there is no reason why *some* norms cannot develop as institutions, but he will be overstressing his point by making it a rule for all norms. Merton (1973, pp. 270-278) provides four principal norms in science: the norm that anybody can contribute to science without racial prejudices (universalism) and the norm in respect of common ownership of intellectual goods or property in science for the purpose of collective collaboration (communalism) are indisputably institutionally developed. However, the norms in respect of the necessity of critical scrutiny (organised scepticism) and the idea that science is not for personal gain (disinterestedness), need not develop

¹²⁰The cases of Galileo (who refused the limitations set up by the society of his time) and Edmund Gettier (who challenged the popular definition of knowledge as justified true belief) provide good examples.

as an institution, might be practiced by individuals in isolation. Besides, Fuller's intention to distinguish normativity in science (social epistemology) and normativity in traditional epistemology arguably suffers a setback because the last two norms are common in philosophy.

One major objection to Fuller is that he misses an important aspect of the position shared by Laudan, Kornblith and Code. For these scholars, some individual ideals become norms in the society after they are established as true, truth-conductive or proven to be pragmatically useful, in scientific, philosophical, moral or social considerations. Fuller's explanation that norms are normative by virtue of being enforceable is controversial. Scholars have objected that people follow norms because they seem right. For Philip Pettit, "neither compliance nor enforcement need have any element of the normative". Rather, he argues that "retaliation against offenders and other forms of punishment provide strong explanation for why people hold norms to be normative" (2010).¹²¹ This argument arguably strengthens the position of moderate social epistemologists that the concept of normativity is not solely social.

However, feminists such as Sandra Harding reject concentration on both the individual and social factors discussed above as constituting the proper focus of a social epistemology. For her, both positions are regarded as "conventionalist" or "Universalist" accounts of knowledge and reality. According to her, the conception of "socially situated knowledge" from the "conventional accounts" involves a contradiction in the sense that "in order to achieve the status of knowledge, beliefs are supposed to break free of – to transcend – their original ties to local, historical interests, values, and agendas" (Harding, 2005, pp. 218-219). In lieu of these positions, Harding's suggestion is that the adoption of the two claims of "standpoint epistemology" will provide a fundamental road map for epistemology: how to get an account of the "real world" and how to arrive at a kind of "strong objectivity" that social epistemology cannot do without. The two claims are: (i)

¹²¹ Quine gives a similar account of why people obey moral rules- in terms of considerations based on reward-penalty (pleasure-pain). See, (1981b, p. 55).

start thought from marginalised lives and (ii) take everyday life as problematic (Harding, 2005, p. 219). With the first claim, it is arguable that Harding is suggesting a kind of social factor that can be called a “group factor”. This “group factor” has specific focus on the experience of women and other marginalised groups. In the second claim, we have a basis for the conceptualization of normativity in the study of the social dimension of knowledge- a problem-solving basis. This approach can be compared with Fuller’s “interest-based” approach.¹²²

One advantage in Harding’s position is that it provides a way of merging both moderate and radical positions on social epistemology. There is an emphasis on the need to attend to concrete human problems as a subject-matter of social epistemology. There is also a suggestion about institutional approach towards theorizing and solving these problems. However, one problem with Harding’s position is that focusing on the experience of marginalised groups in society will foster a narrow kind of social epistemology with its particularistic scope.¹²³ For instance, one can ask how this account applies to, for example, physics. It becomes necessary at this point to consider how taking a Deweyan approach would advance the debate.

5.3 Dewey as a social epistemologist

Dewey’s name is rarely associated with social epistemology in the manner that Wittgenstein’s name is usually associated with the conception of knowledge as a social phenomenon through his language-game-knowledge analogy. The purpose of this section is to argue that Dewey’s naturalistic epistemology offers original and rich views on social epistemology that can put it on firmer ground.

I start this discussion by articulating how Dewey explains individual and social dimensions of knowledge in his naturalist epistemology. In doing so, I note some

¹²² I dwell further on the advantages that the “problematic approach” has over Fuller’s “interest approach” in the subsequent section on Dewey’s social epistemology.

¹²³ One may disagree by arguing that “the marginalised” have privileged access to knowledge about social relations and that standpoint is earned through collective struggle that provides insights. However, I argue that by the concept of “marginalization”, a sub-group within a wider group is implied.

significant similarities in Dewey's and Fuller's critique of traditional epistemology and how this critique provides insights into their conceptions of the social dimension of knowledge. Specifically, I note similarities such as the rejection of abstract conceptions of knowledge, and the idea that community or human interests play significant roles in the quest for knowledge. I then discuss how some notable differences in Dewey's position rescue it from problems that confront Fuller's account, such as relativism, reductionism, and scientism. I also explore how Dewey, like the moderate social epistemologists, is disposed to the idea of an interdisciplinary approach to questions about knowledge, without a philosophical approach (epistemology) being reduced to other cognitive fields.

Finally, I turn to some unique positions in Dewey's epistemology that can broaden the purview of contemporary social epistemology. Such unique positions include his social conception of the community of inquirers, his position on cultural naturalism and his social theory of the human mind. I argue that addressing these issues will shed light on the question whether social epistemic factors are reducible to individual epistemic factors. I conclude by arguing that Dewey's naturalist approach offers a resourceful account of the social dimension of knowledge. I start by discussing how Dewey's naturalist account of knowledge explains the role of the individual and the collective in the formation and retention of beliefs. I also note how these activities take place in socially regulated inquiries. I start with the roles of individuals and the collective in Dewey's naturalist epistemology.

5.3.1 The individual and the collective in Dewey's naturalist epistemology

In *Logic: The Theory of Inquiry*, Dewey writes,

The environment in which human beings live, act and inquire, is not simply physical. It is cultural as well. Problems which induce inquiry grow out of the relations of fellow beings to one another, and the organs for dealing with these relations are not only the eye and the ear, but meanings which have developed in the course of living, together with the ways of forming and transmitting culture with all its constituents of tools, arts, institutions, traditions and customary beliefs (J. Dewey, 1991, p. 48).

Dewey's major point is that both individual and social factors are important in the study of knowledge. Human sense organs are used in gathering information that is indispensable in the process of forming beliefs, and language is used in processing this information into ideas and for transmitting them to others. We can identify Dewey's position with that of moderate social epistemologists such as Kornblith and Goldman. However, it is arguable that he presents an account of how both factors are important or indispensable in inquiries about knowledge as natural human activity. The impression created by Kornblith and Goldman is that the need to acknowledge social factors becomes imperative when it dawns on epistemologists that relying alone on individual factors is inadequate. This is Dewey's naturalism. We have discussed his version of naturalism at length in chapter 1 and its metaphysical and epistemological dimensions in chapters 2 and 3, respectively. Consequently, I will not repeat the discussion here. Rather, for present purposes, I recall some aspects of his explanation for the claim that *problems which induce inquiry grow out of the relations of fellow beings to one another* and briefly reflect on how it points to what I label *social naturalism*. I also recall how his distinction between "self-action" and "interaction" serves as a critique of moderate social epistemologists.

Dewey's account of the development from the primary stage of experience to the secondary indicates a natural and unbroken expansion or development of human knowledge. Dewey describes the direct physical contacts made with nature by humans as crude because they are generally isolated and consequently less social and less-reflective.¹²⁴ The implication of the absence of collaborative reflection is that there is no knowledge and where there is no (socially) regulated inquiry, there is no knowledge (J. Dewey, 1925, pp. 6-7). This is a strong point that supports the position of radical social epistemologists. However, it is notable that Dewey attaches much importance to the purpose to which an epistemological inquiry is

¹²⁴ We noted in chapter three that it does not make sense to argue that when things are "had, used and enjoyed" (primary experience) there is no reflection. Rather, Dewey's position should be read as stating that in primary experience, there is absence of collaborative reflections. Sometimes, Dewey contrasts the two stages of experience by saying that "The distinction is one between what is experienced as the result of a minimum of incidental reflection and what is experienced in consequence of continued and regulated reflected inquiry" (J. Dewey, 1925, pp. 6-7).

committed- the problem that initiates an inquiry or quest for knowledge. Without this problem, inquiry cannot even commence meaningfully or have a direction. For Dewey, problems that do trigger off inquiries ultimately have their roots in the individualistic, less-reflective, crude human experience. More importantly, the success of inquiry is determined by the extent to which this crude primary experience is “enlarged” or rendered “sophisticated”. This is a strong point that favours the position of moderate social epistemologists.

In addition, we can also recall how in Dewey’s work, the concept of “interaction” is often used synonymously with “transaction” and “experience” in terms of a symbiotic relation between human organism and environment (J. Dewey, 1925, pp. 212, 230-237, 351). We described this version “organism-environment” interaction. However, we remarked on how he also uses the concept to denote purpose-oriented social relationships within the human species (J. Dewey & Bentley, 1949, p. 108). We called this “social interaction”. Social actions, such as a traffic policeman regulating the movements of motor cars, are only meaningful from the purview of common goals such as orderliness and public safety. These actions are made necessary with the help of rules and sanctions (J. Dewey, 1925, pp. 155-156). Dewey contrasted this social dimension of “interaction” with “self-action” by defining the latter in terms of individual members of the human species acting in some ways independently of others (J. Dewey & Bentley, 1949, pp. 72, 108).

What is the significance of this distinction between “interaction” and “self-action”? It is arguable that Dewey used “self-action” pejoratively to refer to some theories in traditional metaphysics in which “souls”, “minds”, “selves”, “powers” or “forces” are taken as activating events (J. Dewey & Bentley, 1949, p. 72). To this version of metaphysics his naturalist metaphysics offers a comprehensive critique. It is also arguable that he extends this pejorative description (and his critique) to the practice in traditional epistemology where the meditation, speculation and thinking of individuals are recognized as knowledge-generating. However, “self-action” in a non-pejorative sense, for Dewey, will include human activities or

doings which he called esthetic experience.¹²⁵ More importantly, it will cover those activities of individual members of the community that initiate inquiries:

To a very large extent the ways in which human beings respond even to physical conditions are influenced by their cultural environment. Light and fire are physical facts. But the occasions in which a human being responds to things as merely physical in purely physical ways are comparatively rare. Such occasions are act of jumping when a sudden noise is heard, withdrawing the hand when something hot is touched, blinking in the presence of a sudden increased light, animal-like basking in the sunshine, etc. Such reactions are on the biological plane. But the typical cases of human behaviour are not represented by these examples... Man, as Aristotle remarked, is a social animal. The fact introduces him into situations and originates problems and ways of solving them that have no precedent upon the biological level (J. Dewey, 1991, pp. 48-49).

My contention is that Dewey recognizes “self-actions” as predominant in the stage of raw and less-reflective human transaction within nature otherwise known as “primary experience”. Given that secondary experience has its origin in primary experience, the self-actions, arguably, are raw transactions with nature that trigger a quest for knowledge. The sensation of eating an apple or stepping on hot metal are unique to individuals and generate different and subjective awareness, assessments and reports, which in standard forms, are beliefs. The incompatibility of these beliefs among individuals creates problematic or indeterminate situations which kick-start inquiries at the individual level leading to a wider community of inquirers. From this interpretation, it seems that Dewey subscribes to the argument of social epistemologists such as Kornblith stressing the importance of individual factors in belief-formation processes.

However, Dewey’s point on the social nature of inquiry is important. For him, inquiries are characterised by rule-following and common goal-oriented activities. More pointedly, by placing the terminus of the processes of inquiry and justification in the secondary stage of experience, there is a suggestion that Dewey subscribed to the view that the process of epistemic justification is ultimately social. However, his contention that “there is no breach of continuity between the operation of inquiry and biological operations and physical operations” (J. Dewey,

¹²⁵ I will shed more light on the social nature of esthetic experience in section 5.10.2.

1991, p. 26), suggests that he is not committed to the separation of social facts from individual facts as emphasized in the position of radical social epistemologists such as Fuller.

From the trend of our discussion, it is evident that both positions maintained by the protagonists in the contemporary debate about the nature of social epistemology are equally prominent in Dewey's naturalist philosophy but in a clarified manner. I contend that Dewey's position does not end in a mere truce. I believe that he was able to defuse the tension generated by the question of primacy between individual and social factors by offering an empirical, un-broken and non-dualistic naturalist account of human interactions. An instructive explanation of how individual experiences transform into collective experience is provided. The significance of Dewey's conception of social institutions lies in its dependence on the interaction of individual.

In the remaining parts of this chapter, I further articulate how Dewey offers a non-reductive empirical and practical account of social epistemology by exploring his conception of the methodology for epistemology. I use this exploration to defend Dewey's unique contributions to the debate on the nature of social epistemology.

5.3.2 Articulating an empirical social epistemology from Dewey's denotative methodology

I have discussed Dewey's denotative empirical method in the previous chapters but for present purposes, I will reiterate how its experimental and collaborative nature is important for a social epistemology.

...But empirical method points out when and where and how things of a designated description have been arrived at. It places before others a map of the road that has been travelled; they may accordingly, if they will, re-travel the road to inspect the landscape for themselves....The scientific investigator convinces others not by the plausibility of his definitions and cogency of his dialectic, but by placing before them the specified course of searchings, doings and arrivals, in consequence of which certain things have been found... (J. Dewey, 1925, p. 28).

Two points are important here for our understanding of what makes an epistemology social. The first is that inquiry is a continuous activity with all its

phases connected with human natural conditions. A phase in an inquiry may commence with the efforts of an individual or a collective. However, the full process of inquiry is a cooperative exercise extending to past and future. The process of verification is essentially a public affair. Agreement on what is the truth of the matter is a matter of agreement over the long run. Abstract thinking and perceptual awareness may be private but knowledge is not. This position provides good support for the contention that social epistemology is normative and continuous with traditional epistemology.

The second point is Dewey's emphasis on the need for an empirical and experimental approach in every epistemological investigation. Arguably, this will provide road-maps for preventing theories and debates in social epistemology from degenerating into perennial "idealistic" metaphysical problems such as the question whether social factors are independent of individual factors that has polarised contemporary social epistemology. However, there are other advantages in adopting this method.

A question can be raised against Dewey's position: If verification is by agreement over the long run, agreement by whom? If agreement on knowledge is attributed to some epistemic investigators in some specific social contexts, this will open him up to the charge of relativism (as we have discussed against Fuller's position). Dewey's answer is that consensus in science are not relative to any region of the world. This consensus is engendered by the cooperative tendencies in scientific methodologies- a feature which denotative empirical methodology is modelled to embrace. Dewey's larger claim is that a social epistemology grounded in an empirical and naturalistic metaphysics will have equal empirical and experimental footing with science. For instance, Dewey's epistemology recommends seeing "knowledge" as an instrument for manipulating nature and "social factors" as an empirical phenomenon characterized by interactive human activities carried out for some common goal.

Another peculiar feature of Dewey's denotative empirical methodology that we have discussed in chapter three is that it encourages phenomena to be studied

specifically and historically. For Dewey, an empirical and historical study of societal factors will reveal individuals interacting with one another in pursuit of some common goals.¹²⁶ It is arguable that Dewey offers an empirical and experimental analysis of social factors that is lacking in Fuller's account.

The analysis of Dewey's recommended methodology provides insights into Dewey's conception of community that is essential for social epistemology. I briefly discuss this conception to show Dewey's emphasis on the importance of interactions among members of the community and how this focus enhances a non-reductive social dimension of knowledge.

5.3.3 Dewey's conceptions of community and community of Inquirers

In his attempt to explore aspects of Dewey's conception of community, James Campbell cites some remarks from Dewey's works. One of these is that "Shared experience is the greatest of human goods [LW1:157]" (Campbell, 1998, p. 34). Another is that "Everything that exists in as far as it is known and knowable is in interaction with other things [LW1:138]" (Campbell, 1998, p. 33). Campbell used these remarks to articulate Dewey's conception of community from notions of association or interaction in human natural existence. Dewey's conception of community sheds further light on the indispensability of both individual and collective factors in social epistemology. More importantly, a naturalist account of how the "community" emerges from social interactions of the individuals is provided. For instance, Campbell emphasised Dewey's rejection of the belief that a community should display "homogenized and monochromatic sameness".

[Dewey] recognises that no community can be a community without some high degree of sharing. However, this communality should also imply a richness or complexity of possible perspectives that can be entered into, not the simplicity of identity. The advancement of community does not require, Dewey believes, "a sacrifice of individuality; it would be a poor kind of society whose members were personally undeveloped" [LW7:345] (Campbell, 1998, pp. 32-33).

¹²⁶ We noted the relevance of the debate between individualists and holists in chapter three. However, the exploration of the debate will not be part of the present purposes.

The key terms for understanding Dewey's conception of community of inquiry are: (i) social interactions (or shared experience) and (ii) human purposeful manipulation of nature. These terms manifest across activities that characterize both primary and secondary experience. Human transaction within nature leads to communication and inquiry and finally to the establishment of common goals or interests. The realization of these common goals marks the attainment of knowledge. It is in this sense that Dewey described knowledge "as a mode of interaction" (Dewey, 1925, p. 352) and regarded *participation and sharing as the fruit of communication* (Dewey, 1925, p.138). On communication, he writes:

When communication occurs, all natural events are subject to reconsideration and revision; they are re-adapted to meet the requirements of the conversation, whether it is public discourse or that preliminary discourse termed thinking... Brute efficiencies and inarticulate consummations as soon as they can be spoken of are liberated from local and accidental contexts, and are eager for naturalization in any non-insulated, communicating, part of the world (Dewey, 1925, p.138).

Dewey's point is that communication marks the transition from primary experience (where things are had, used and enjoyed) to the secondary experience (where socially coordinated discussion of experience and inquiries are continuously carried out). Through communication, individual experiences (or beliefs) are expressed or communicated to others who react either by corroborating or disagreeing. Dewey sees this as the point at which inquiries begin. Dewey's emphasis is on the impact of communication, (as a social phenomenon with socially coordinated rules and practices) on inquiries and processes of validating claims, rendering them essentially social activities. Consequently, a community of inquirers, for Dewey, will be any group of individuals who are involved in some coordinated and regulated processes of inquiry for the purpose of solving some problematic or indeterminate situations. The goal is fundamentally about the survival of the human species.

In his articulation of how "fitness" is used by Dewey to designate any activity that is instrumental to human survival, Hickman writes:

The conditions with respect to which the term "fit" must now be used include the existing social structure with all the habit, demands, and ideals which are found in it.

If so, we have reason to conclude that the “fittest” with respect to the whole of the conditions is the best ... The unfit is practically the anti-social [EW5:89] (Hickman, 1990, p. 182).

Here, a social structure is defined in terms of its actual or intended contributions towards human collective survival. In this sense, factors regarded as peculiarly “individual” or “social” among contemporary social epistemologists will both be described as mechanisms for human “fitness” and survival. For Dewey, “individual” does not denote “non-social, much less anti-social”. “Communal”, on the other hand, is not anti-individual but rather “it is to enable an individual to reach a fuller manifestation of his own power...” (J. Dewey, 1968, pp. 374-375).

The instrumental nature of individual and social factors in Dewey’s epistemology can also be gleaned from Savage’s understanding of Dewey’s conception of culture.

Dewey believed that social, political, and economic institutions and norms could be evaluated on the basis of their ability to adapt individual quests for the good life, that is, self-development, to the objective environmental conditions in which the individual exists... A culture should provide the social environment in which a continual cooperative inquiry into the most beneficial institutions and norms can be conducted (Savage, 2002, p. 3).

The point from Savage’s understanding of Dewey’s notion of “culture” is that it is an instrument. The formation of communities or cultures and norms are parts of the organism-environmental transactions. They are part of the human strategies for survival. For Dewey, these are products of secondary reflective experience and are not to be treated as a kind of absolute because they are contingent upon primary experience. They are not isolated and self-sufficient (J. Dewey, 1925, p. 13). They are means of enlarging the understanding of the non-cognitive aspects of human transactions.

From the foregoing, it is notable that Dewey’s position, characteristically, is not compatible with any sense of “individual” and the “social” that is too radical in the sense that ontological or conceptual dualism is implied. Consequently, it is reasonable to conclude that both social and individual factors are equally important in his account of social epistemology. However, the contention in this

work is that, with Dewey's naturalist position, an empirical explanation is offered for the "individual" and "social factors". Arguably, this conceptual clarification enhances the prospects for social epistemology. I turn to discuss instrumentalism in Dewey's naturalist epistemology and show how it is devoid of the problem of relativism that Fuller's position faces. I argue that this advantage makes Dewey's position more tenable.

5.3.4 Dewey's Instrumentalist Epistemology and the rejection of epistemological relativism

One important claim found prominently in Dewey's naturalist metaphysics is that there are numerous problematic or indeterminate situations resulting from human transactions with nature that are global in scope. There are challenges from evolutionary changes such as climate change and other natural disasters that predate them such as famine, and drought. There are threats from highly contagious epidemics and there are wars and other social problems that defy international boundaries. These are precarious aspects of nature that are universal to humans (J. Dewey, 1925, pp. 38-39, 97). The existence of these global problems, for Dewey, indicates the existence of some inquiries that demand global participation and direction by global interests.

Using Dewey's claim that the human quest for knowledge begins from the quest to resolve "indeterminate" situations" so that knowledge inherently functions as a "problem-solving phenomenon", it is possible to construct a scene where several cultures with different and seeming incompatible *forms of life* must adopt a unanimous or an *amalgamated form of life as a matter of necessity*. Imagine a man from the culture similar to the oracle-consulting people described by Wittgenstein, sailing in a boat on a high sea with fellow travellers from different cultures. Suppose this man cannot swim but he has earlier received a message from an oracle that he cannot be drowned in any circumstances. Now the man starts to dig a hole under his own seat in the boat. The other travellers try to convince him that in the middle of the sea where nobody can hope to swim ashore, it is suicidal to test such an oracular prediction.

From this scenario, we can derive these propositions that capture Dewey's position:

- (i) Where problematic situations are not confined to a given context, they can condition the amalgamation of cultures or different forms of life.
- (ii) Where cultures and forms of life are amalgamated, there can be unified or non-contextual inquiries or collaborative inquiries and consequently the possibility of conception and attainment of objective (non-contextual) knowledge and truths.
- (iii) Where problems are shared across cultures, rational arguments are possible and applicable.

It is arguable that the hypothetical situation described above matches the current concern about the danger of climate change and the responses it generated from countries around the world. Climate change is a general world problem that forces collaborative inquiries toward one goal- to save the world from extinction. The fact that the world is "increasingly unanimous" on the fact of the danger posed by climate change arguably points to a non-relative truth. The generality of the threat indicates a non-contextual subject-matter. The unified decision to adjust their "forms of life" to engender a solution points toward what we can call a universal knowledge in this situation. Dewey's contention that "common" problematic situation can necessitate a larger scale of interactions and common inquiry is justified in the countries of the world coming together in France to compel China and India (the two greatest world polluters) to reduce their emissions of greenhouse gasses into the atmosphere. More importantly, there are proposed solutions (for instance bringing the rise in temperature of the world under 2 degree Celsius), a parameter for marking when a solution to this problem is reached. This solution, for Dewey, is knowledge and it is attained when a problematic or indeterminate situation is brought under control.

One point that needs to be noted is that the possibility of resisting epistemological relativism in Dewey's philosophy is largely due to the peculiarity of his conception of metaphysics and epistemology and the relationship between them. For instance, his metaphysics can be described as a "social and empirical metaphysics"

that is meant for “social engineering”. He rejects transcendental or absolute metaphysics because it tries to account for existence that goes beyond human experience. For Dewey, metaphysics is all about human transactions with nature. However, as noted by Gouinlock, Dewey’s naturalist metaphysics goes beyond offering an empirical description of human experience. It offers criticism of values as well.

A naturalistic metaphysics provides a “ground map” for criticism in the obvious sense that it makes clear the continuities and intermixtures of the traits of nature and it displays their function in various kinds of experience. Thus, it makes criticism of values both intelligible and efficacious. If only implicitly, any coherent and effective theory of criticism must presuppose a metaphysics that characterizes nature at least as thoroughly and faithfully as that of Dewey (Gouinlock, 1972, p. 41).

It is in this sense that Dewey’s problem-solving analysis of knowledge is explanatorily superior to Fuller’s interest-based analysis of knowledge, even though both positions arguably endorse an “instrumental” analysis of knowledge. While Fuller’s analysis highlights how knowledge is instrumental towards the “satisfaction” of interests of specific societies, making relativism inevitable, Dewey enlarges or “generalises” the scope of these interests by locating their roots in problematic natural conditions shared by all societies. In the climate change scenario we discussed above, it is possible to have a solution that will serve only the interests of the developed countries and consequently solve the problem relatively and superficially. However, Dewey will want to address the root cause of the problem by examining “forms of life” that are responsible for the threat and thus give ‘justice’ to the voice-less and under-developed countries whose interests may not be represented in the compromise-interest-satisfying approach recommended by Fuller.¹²⁷

¹²⁷ However, Thomas Alexander raises a point concerning how Dewey used the terms “denotation” and “pointing” ambiguously. According to him, “Dewey recognised that any act of pointing required a defining context of shared life activity”. From this view, Alexander states that “Dewey does not believe that we can begin with a neutral, interpretation-free method of denotation” (T. M. Alexander, 1987, pp. 88-89). Alexander hopes to resolve this “paradox” by arguing that, from Dewey’s perspective, “the world is more than what it is during our moments of inquiry and reflection” (T. M. Alexander, 1987, p. 89). I think a bolder way to respond is to argue that contextualism is different from relativism. A number of scholars have done this (Annis, 1978; DeRose, 1999; Pynn, 2015; Schiffer, 1996).

Consequently, Dewey arguably succeeds in establishing a metaphysics that can provide a foundation for social theory. Dewey's epistemology is more empirical and practical than traditional epistemology. However, there is a continuity between Dewey's account and traditional epistemology by virtue of the metaphysical theory underlining his epistemology. Tracing the "causal links" between knowledge and Nature, on one hand, and between nature and goals of human existence, on the hand, arguably will preserve the philosophical approach to knowledge. The preservation of this distinctive "philosophical approach" is further highlighted in Dewey's conception of normativity in epistemology.

5.3.5 The concept of normativity in Dewey's epistemology

We have discussed the importance of social interaction and collaboration in Dewey's conceptions of inquiry, and how these factors underscore his account of the social dimension of knowledge. We will now explore the importance of social interaction in Dewey's conception of *normativity*.

In chapter 3, we have discussed how Dewey insists that his naturalist or experimental epistemology, like traditional epistemology, is a normative discipline. It is normative in the sense that naturalist epistemologists are still interested in establishing principles or methodologies that can be used in differentiating knowledge-claims that are justified from those that are not. This implies that the concept of truth remains equally important as in traditional epistemology.

However, for present purposes, I focus on two aspects of Dewey's view of the validation of knowledge-claims. The first is his practical notion of justification. The second is his analysis of justification in terms of *consensus* among communities of inquirers. Dewey's conception of justification, like Fuller's, offers a radical challenge to the traditional conception of justification by seeing justification in terms of practical considerations rather than in terms of rationally acceptable *a priori* argument or empirical (but non-practical) arguments. Dewey explains justification in terms of choosing a hypothesis (among several) that experimental

inquiries can show as offering a possible solution to a problematic or recalcitrant situation. In his explanation of this “warrant”, rational choice plays a decisive role just as traditional epistemologists intended in their theory of justification. However, unlike the “rational choice” in traditional epistemology that is determined by the logical structure of arguments (coherence, consistency, validity and so on), Dewey’s rational choice is ultimately based on the consequences of choosing to act in a certain way. For him, it is *practical experimentation* that makes his notion of justification more rational or less arbitrary.¹²⁸

With Dewey’s focus on action rather than propositional attitudes, his analysis of justification is like Fuller’s reconceptualization of normativity from belief-based to action-based. In addition, both scholars contend that the justification of a knowledge-claim must have some material implications (actual or potential) in the physical world. Both reject a notion of justification in terms of absolute knowledge attained by some ideal rational knower. Both scholars hold some kind of “consequentialist” approach to justification, Dewey’s notion is in terms of problem-solving and Fuller’s notion is in terms of interest-satisfaction. However, what is equally important to our discussion is Dewey’s explanation of how this “rational choice” is made. For him, the choice is a matter of consensus among the community of inquirers only after sufficient inquiry has taken place.

One of the most remarkable aspects of Dewey’s social conception of justification is that despite challenging the traditional conception of the notion as non-naturalistic or “realistic” (about its incompatibility with what evolutionary theory offers in that respect), there is a sense in which there is continuity between his naturalist and social epistemology and traditional epistemology. Firstly, while the absolute conception of truth in traditional epistemology is rejected, Dewey is still interested in notions of truth, justification and knowledge that reflect both the dynamic or interplay of stability and precariousness in nature. The relation

¹²⁸ Dewey contends that a choice “loses arbitrary character when its quality and consequences are such as to commend themselves to the reflection of others after they have betaken themselves to the situations indicated; it becomes significant when reason for the choice is found to be weighty and its consequences momentous” (J. Dewey, 1925, p. 29).

between truth, justification and knowledge on one hand, and dynamic nature, on the other, is objective in this non-absolute sense. Furthermore, unlike Fuller, he does not identify social epistemology with sociology of knowledge as we have seen implied by Fuller's seeing social epistemology as descriptive or sociological. He did not see the need to replace the philosophical sense of normativity with the scientific sense of normativity as we have seen Fuller did in his reconceptualization of the traditional conception of normativity. However, it is noteworthy that Dewey recommends a multi-disciplinary approach to social epistemological investigations in such a way that the philosophical approach to knowledge is not rendered irrelevant or obscure. I now discuss three epistemological issues opened up in this manner.

5.3.6 Dewey's continuity thesis; the enlargement of the scope of epistemology

I have discussed earlier in this chapter how social epistemologists must answer the question what differentiates social epistemology from traditional epistemology, on one hand, and sociology of knowledge, on the other hand. I have also suggested that identifying some specific subject-matters as marking the scope of social epistemology will be more informative and convincing than offering definitions. In this section, I discuss three aspects of Dewey's epistemology that arguably can enrich discourses in contemporary social epistemology. I discuss Dewey's social conception of the human mind and his conception of "esthetic" or lived experience. I discuss how these issues, which are supposed to be "strongholds" for non-social or private experience, are opened up to empirical and social theory through Dewey's naturalist account of them. The third aspect of Dewey's work that I also discuss is cultural naturalism.

5.3.6.1 Dewey's Social Conception of the Human Mind

In the previous sections, we have discussed the argument of the moderate social epistemologists (such as Kornblith) that in the formation of beliefs, individual endowments such as the brain and the senses are indispensable. We also considered his argument that these individual factors are irreducible to social

factors. In addition, we considered a rejoinder that as much as these beliefs are expressed through a language, the social influence must be acknowledged. The same arguments about indispensability and irreducibility can be extended to the nature and cognitive functions of the human mind in respect of the roles of thought, reasoning, and imagination in the formation and retention of beliefs. However, theories of human mind in traditional epistemology (such as Cartesian theory), arguably indicate that the human mind is subjective in the sense of being private and not subject to *direct empirical investigations*.

In acknowledgement of the challenge posed by the idea of a subjective human mind, several contemporary social epistemologists such as Goldman (2014), Bird (2014) and Pettit (2011) have shown keen interest in whether or not there are “group minds”- a shared mind among several bodies or entities. This consideration extends to other collective epistemic terms such as collective or group belief, group action, group intention, collective justifiedness and institutional persons. As rightly noted by Goldman and Bird, a subscriber to the term “group mind” must answer several questions that embrace ontology, psychology, and epistemology, respectively. Do group entities exist at all? Do group entities have psychological properties, specifically propositional attitudes? How can the relationship between a group mind and the minds of its members be explained? (Bird, 2014, p. 42; Goldman, 2014, pp. 12-15). Take for instance some of the attempts made to explain the relation between the collective and the individual in reference to group attitude. Goldman considers the suggestion that collective subjects have a qualified supervenience relation to their members as “a reasonable metaphysical position” but prefers to explain the relation by stating that “the propositional attitudes of collective subjects are grounded in propositional attitudes of their members plus the group’s organizational structures.”¹²⁹ List and Pettit contend that “the things a group agent does are clearly determined by the things its members do” (2011, p. 64).

¹²⁹ Goldman (2014, p. 12) credits this suggestion to List, P and Pettit, P. (2005, 2011).

In her presentation of the debate, Jennifer Lackey juxtaposes “summativist” and “anti-summativist” positions. For the summativists, Lackey cites Quinton’s remark that “groups are said to have beliefs, emotion, attitudes and to take decisions and make promises”, but that *this way of speaking is metaphorical* because it is an indirect way of ascribing such predicates to members (2014a, p. 64). Lackey describes this position as a reductionist position. She presents the anti-summativist position as a view stating that collective terms such as group testimony is irreducible to that of all or some of its members, so an anti-summativist position is a non-reductionist position.¹³⁰

For present purposes, I will neither spell out in detail any theory of group mind nor attempt any deeper evaluation of the debate on whether there are group minds. However, I contend that the debate is not significantly different from our previous debate on whether social factors are reducible to individual factors. Concepts such as group mind and group belief are controversial. Consequently, introducing them does not help to explicate the nature of social epistemology nor its advantages over traditional epistemology. Here, turning to Dewey’s analysis of the human mind becomes important as an alternative to the traditional conception of human mind.

In Chapters One to Four, we made reference to how Dewey’s rejection of dualism between mind and body is an important thesis in his version of naturalism. For present purposes, I will reiterate three descriptions of the human mind in the traditional epistemology that he rejects. Firstly, he rejects the ontological thesis that depicts the human mind as immaterial phenomenon, distinct and separable from human body. Secondly, he rejects the thesis stating that because the mind is immaterial, it cannot be studied empirically (directly) but only by introspection.

¹³⁰ Lackey contends that the following case supports the non-reductionist position of the anti-summativists: “A jury deliberating about whether the defendant in a murder trial is innocent or guilty. Each member of the jury is privy to evidence that the defendant was seen fleeing the scene of the crime with blood spatter on his clothes, but it is grounded in hearsay that, though reliable, was ruled as inadmissible by the judge. Given the admissible evidence, the jury as a group justifiedly believes that the defendant is innocent, but not a single juror justifiedly believes this proposition because it is defeated for each of them as individuals by the relevant reliable hearsay evidence” (Lackey, 2014b, pp. 2-3).

Thirdly, he rejects the view that the human mind has the capacity to process and apply concepts to sensory inputs. How relevant is this critique to the debate concerning the identity of social epistemology? The point is that social epistemologists cannot avoid the question about the role of the human mind in the formation and retention of beliefs. Any social epistemologist who appeals to the nature and cognitive functioning of the human mind as traditionally construed, will implicitly or explicitly embrace an individualistic, non-empirical, subjective foundation of knowledge. This will constitute a challenge to the prospects of social epistemology that aims to present knowledge as a social, empirical and science-inclined phenomenon.

However, Dewey argues that “mind” is “existentially an adverb “and not a noun. He explains the adverbial nature of “mind” in terms of “disposition of activity” (J. Dewey, 1925, p. 132). His argument is that “thought”, “reason” and “intelligence” are *the generic traits of human mind without which its nature cannot be known* (J. Dewey, 1925, p. 172). With the human mind defined as disposition *to act in certain ways*, the notion of a “private belief” becomes a misnomer. This is because the function of the culture or society in which the human mind resides, is to educate, assimilate and incorporate individuals. For him, customs and traditions are more than mere overt ways of acting- “Custom is Nomos, lord and king of all, of emotions, beliefs, opinions, thoughts as well as deeds” (J. Dewey, 1925, p. 173). The human mind, according to Dewey, is “the ordered system of all the characters which constituted kinds, differing among men, differing according to differences of organic constitutions” (J. Dewey, 1925, p. 172).

More importantly, Dewey provides an empirical account of the link between human thought and action when he writes:

Empirically, all reflection sets out from the problematic and the confused. Its aim is to clarify and ascertain. When thinking is successful, its career closes in transforming the disordered into the orderly, the mixed-up into the distinguished or placed, the unclear and ambiguous into the defined and unequivocal, the disconnected into the systematized. It is empirically assured that the goal of thinking does not remain a mere ideal, but is attained often enough so as to render reasonable additional efforts to attain it (J. Dewey, 1925, p. 57).

Again, linking the functioning of the human mind to causal factors in natural events, Dewey writes:

A naturalistic metaphysics is bound to consider reflection as itself a natural event occurring within nature because of the traits of the latter. It is bound to inference from the empirical traits of thinking in precisely the same way as the sciences make inferences from the happenings of the suns, radio-activity, thunderstorms or any other natural event. Traits of reflection are as truly indicative of the traits of other things as are the traits of these events (J. Dewey, 1925, pp. 59-60).

As rightly noted by Sleeper, Dewey held that “mind is not a substance located in the brain, but simply the power of the individual organism to manipulate signs and symbols in its quest for survival” (Sleeper, 1986, p. 126). In his comment on Dewey’s view that thinking also qualifies as a kind of hypothesis or experiment in which the worth of thought is tested, Boisvert noted that “it is not haphazard. It is guided by ideas understood as hypothetical anticipations of desired results” (1998, p. 41). All these views corroborate Dewey’s argument that thinking is a substantive natural event. The explanation of the cognitive functioning of human mind in terms of a spiritual or “self-regulating” mechanism capable of mirroring nature is rejected.

The significance of this social and empirical theory of the human mind in social epistemology is twofold. The first importance is that the theory reinforces the argument that the influence of the social or collective extends to both processes for belief formation and retention. The second is that the theory succeeds in erasing the traditional boundaries between epistemology, philosophy of mind, psychology and sociology in respect of the study of the nature and cognitive functions of human mind. Such an interdisciplinary approach could greatly enrich discourses in contemporary social epistemology.

5.3.6.2 Social epistemology and esthetic or lived human experience

Other Dewey’s unique contributions to social epistemology can be articulated from his enlargement of its scope or subject-matter. Chapter 2 discussed extensively how Dewey contends that all traits of experience are the subject-matter of his naturalist metaphysics. By “traits of experience”, he usually meant a

general description of all the activities or events that occur in human/nature symbiotic “transactions”- how the nature affects the histories of humans and humans manipulate nature to cope with it. Thus, “intellectual and moral endeavours”, as attempts to understand and cope with nature, are traits of experience.

However, Dewey argues that, although “intellectual and moral endeavours” have dominated the preoccupation of philosophers, other traits deserve equal attention. One such trait he calls “esthetic experience”:

Human experience in the large, in its coarse and conspicuous features, has for one of its most striking features preoccupation with direct enjoyment: feasting, festivities, ornamentation, dance, song, dramatic pantomime, enacting stories, telling yarns and enacting stories. In comparison with intellectual and moral endeavour, this trait of experience has hardly received the attention from philosophers that it demands (J. Dewey, 1925, p. 67).

Dewey describes these activities as “lived experience” because they are integral aspects of human transaction within nature. They are coping strategies- consummatory in degrees in which they exuberantly enhance escape from the pressure of natural surroundings (J. Dewey, 1925, p. 70). He describes these activities as “esthetic” because they relate to “direct enjoyment”:

Esthetic, fine art, appreciation, drama have an eulogistic flavour. We hesitate to call a penny-dreadful of fiction artistic, so we call it debased fiction or a travesty on art...Thus we miss the point. A passion of anger, a dream, relaxation of the limbs after effort, swapping of jokes, horse-play, beating the drums, blowing the tin whistles, explosion of firecrackers and walking on stilts, have the same quality of immediate and absorbing finality that is possessed by things and acts dignified by the title of esthetic (J. Dewey, 1925, pp. 68-69).

Dewey’s contention is that all lived or esthetic human experiences are inherent parts of the subject-matter of his naturalist epistemology (and, by extension, the subject-matter of science). What makes these esthetic activities *knowledge*? Apart from their importance as “instruments” in humans’ attempt to cope with nature, Dewey argues that there is a more compelling reason why traditional epistemologists should have shown keen interest in these traits of experience:

It would be difficult to find a fact more significant of the traits of nature, more instructive for a naturalistic metaphysics of existence, than this cleavage of the things of human experience into actual but hard objects, and enjoyed but imagined objects. One might think that philosophers in their search for some datum that possesses properties that put it beyond doubt, might have directed their attention to this direct phase of experience, in which objects are not a matter of sensations, ideas, beliefs or knowledge, but are something had and enjoyed... In comparison, the "self-evident" things of philosophers are recondite and technical (J. Dewey, 1925, pp. 71-72).

His point is that esthetic experiences offer rich and "natural" materials for philosophical discussion about human knowledge. Because they are "phenomena of social life", they reflect the social dimension of knowledge. Comparing the importance of studying the phenomena of social life with values derived from our preoccupation with science, he writes:

The features of objects reached by scientific or reflective experiencing are important, but so are all the phenomena of magic, myth, politics, painting, and penitentiaries. The phenomena of social life are as relevant to the problem of the relation of individual and universal as are those of logic... (J. Dewey, 1925, p. 20).

Dewey's point is that a naturalistic understanding of esthetic experiences is as important to human survival as our scientific attempt to understand and conquer nature for human survival. Put differently, he seems to be suggesting that the distinction between science and non-science cognitive pursuits become irrelevant when "lived human experience" becomes recognised as the focus of a naturalistic and social epistemology. In Thomas Alexander's strong word, Dewey was trying to create a new "science of nature" which seems to depict a unification of all human cognitive pursuits.

[Dewey] attempted to create a new science or, rather, radically to transform and reground the science of psychology. Dewey's "new psychology" would start with lived experience and attempt to understand it in terms of organic movement and wholeness (T. M. Alexander, 1987, p. 19).

It follows from this view that restricting epistemological discourse to issues that traditionally have been defined as constituting "intellectual and moral endeavour" will impoverish epistemology. Also, attaching more importance to scientific values at the expense of values we can derive from studying esthetic experience will impoverish human knowledge. Dewey's suggestion is that we can examine,

theorize and experiment on human experiences such as festivals, happiness, sorrow, music, hobbies and so on, to see the connection between human experience and knowledge. With these esthetic experiences analysed in terms of instruments for the survival of a social or collective entity, they become an important subject-matter for social epistemology. It is arguable that the subject-matter of social epistemology that reflects a more detailed social life of humans can be articulated from this wider spectrum.

5.3.6.3 Social Epistemology and Dewey's cultural naturalism

Our final discussion of Dewey's enlargement of the scope of social epistemology is on the articulation of what he calls cultural naturalism (J. Dewey, 1991, p. 28). What does this mean? I start my discussion by stating briefly that in contemporary discussions about the relationship between nature and culture, the traditional dualistic or antithetical conception of the two phenomena has been challenged. I compare the grounds for the rejection of this traditional view with Dewey's rejection of such dualism. I also discuss some new insights from neurobiologists, philosophers and psychologists such as Fabrice Clement and Kaufmann Lawrence (2007) on culture in terms of reductionist approaches and naturalistic explanations. I critique these new insights by contrasting them with Dewey's position. I then show that while these scholars' explanation of the relationship between individuals and culture rekindles the tension between protagonists in the debate over individual and social factors, Dewey's explanation does not.

Recent work by Fabrice Clement and Kaufmann Lawrence notes that in recent discussions about culture, the traditional conception of culture as antithetical to nature has become unacceptable.

Recently, new insights into this everlasting opposition have been given by some neurobiologists, philosophers and psychologists. To them, pitting nature against culture as two opposite forces between which human species are tossed back and forth, escaping from biology to be better enslaved by culture and conversely, is pointless (Fabrice & Kaufmann, 2007, p. 7).

These scholars note some attempts made to resolve this.¹³¹ The attempt which they favour is a naturalistic approach based on the idea that “the study of culture cannot ignore the fact that nature plays an important role in the development of culture” (Fabrice & Kaufmann, 2007, p. 8). These scholars considered cognitive science and its multi-disciplinary approach, “the approach that encompass all the processes, such as categorization, memory, and attention, through which society and/or shared culture enter the mind”. This is the “study of the cognitive equipment that enables agents to sustain social and cultural facts” (Fabrice & Kaufmann, 2007, p. 9). How can naturalism cash out this bridging role?

The authors see the strength of this approach in the fact that it nether entails ontological reductionism (the idea that only physical particles and forces exist) nor epistemological reductionism (the idea that only the models of justification and explanation in science are acceptable) (Fabrice & Kaufmann, 2007, p. 9). However, it is arguable that in this approach, the authors implicitly choose the bottom-up explanation (“mind-shapes-culture”) and reject top-down explanation (“culture-shapes-mind”), a choice that arguably rekindles the tension in the debates over the priority between individual and social factors. It is on this note that we turn to Dewey’s naturalist position on culture.

In Dewey’s *Experience and Nature* and *Logic: The Theory of Inquiry*, he offers a naturalist approach to both “experience” and “culture” for the purpose of redeeming them from dialectical definitions (J. Dewey, 1925, pp. 1, 47-49) and “sectarian” and “provincial” contents (J. Dewey, 1925, p. 37). For present purposes, my aim is to articulate the social dimension of this Deweyan project. Instead of attempting to define culture, I start the discussion by highlighting Dewey’s comparison of experience with culture in terms of complexity (or what Dewey calls “double barrel-ness”) and in terms of action-doings that are continuous with nature. I take this comparative analysis to be more informative

¹³¹ These scholars cited some works in which the conception of antithesis is replaced with the idea that human mind “is pre-wired for cultural learning and knowledge acquisition that will allow it to escape from strict genetic determinism” (Fabrice & Kaufmann, 2007, p. 7).

and rewarding. I then discuss Dewey's conception of the experimental nature and instrumental usefulness of both phenomena.

In Chapter Two, we have discussed Dewey's rejection of the standard or popular view that polarises experience and nature. We also discussed his claim that "experience" is not just a word depicting "awareness" or "mode of knowing" but "a double-barrel" word that covers the entire complex of human activities. However, it seems that Dewey regards "experience" as synonymous with "culture".¹³² For instance, he contends that "experience has its equivalents in such affairs as history, life, culture" (J. Dewey, 1925, p. 37). He compares the complexity or diversity of experience with anthropologists' conception of culture as "that complex whole which includes knowledge, belief, morals, custom, and any other capabilities acquired by a man as a member of society" (J. Dewey, 1925, p. 37). It is arguable that both experience and culture indicate human transactions with nature. Consequently, one can argue that culture is a kind of phenomenon that is developed out of reflective human acts and collaborative inquiries and became an instrument for coping with and adjusting between the precarious and stable manifestations of nature.

However, Dewey's idea of how cultures are formed seems to imply that a culture (like the "symbolic" Dewey's secondary experience) is a product of human cognitive inquiry. This suggests that Dewey subscribed to the bottom-up explanation of culture ("mind-shapes-culture) that we have previously attributed to Fabrice and Kaufmann and described as increasing the tension between radical and moderate social epistemologists. Is this impression untenable? Thomas Alexander seems to corroborate this impression when he was discussing the connection between Dewey's notion of generic traits of existence and culture:

We do not begin our inquiries, especially metaphysical ones, except under certain defining situations. Unless one has lived and interacted with others, learned a language and participated in a culture with its stories and traditions, one cannot even

¹³² Dewey actually said that "experience" is the subject-matter for both science and the philosophy because it is "synonymous" with "nature" (J. Dewey, 1925, pp. 1-36). However, this suggestion is confirmed in Dewey's remark that he ought to have written the title of his book as "Culture and Nature" instead of using the title "Experience and Nature".

begin to ask questions. Questions which concern the general nature of things only arise after a culture has provided a rich, symbolic, cultural matrix and has come to a point where, as with the Greeks, the idea of inquiry itself has been discovered (T. M. Alexander, 1987, p. 89).

Is Dewey inconsistent? I don't think so. I offer two answers to this question. First, Dewey's notion of human mind is different from notions that depict human mind as separable either from the human body or nature. Consequently, the bottom-up analysis of culture does not fit into Dewey's naturalistic metaphysics. Second, it is arguable that any interpretation of Dewey's naturalism that puts the reflective or cognitive stage of human experience (described as secondary experience) before the discovery of inquiry will be a mis-interpretation of Dewey. One possible explanation is that the kind of cultures that Alexander Thomas was referring to in the passage quoted above are modern and complex cultures while Dewey arguably was interested in the formation of traditional or folk culture.

What can contemporary social epistemologists learn from Dewey's naturalist account of culture? Firstly, dualism between nature and culture becomes untenable and like "experience", "culture" depicts human natural transactions with nature. Secondly, a natural, empirical, and social account of the generic foundation and social function of culture is provided. For instance, unlike some anthropologists who claim that "culture begins at the point at which humans surpass whatever is simply given in their natural inheritance" (Edgar & Sedgwick, 1999, p. 102) which arguably indicates a culture/nature divide, Dewey argues that culture embodies the human/nature symbiotic relation. In addition, unlike some anthropologists who claim that "culture is social in so far it affirms a civilising mission" (Swingewood, 1998, p. xi), Dewey attributes a more fundamental social function to culture in terms of being *a cohesive force, action-undergoing and an instrument for the survival of human species*. It is arguable that Dewey's conception of culture as human transactions with nature goes deeper than what anthropologists such as Nick Shaheed describe as "the product of symbolic forms and conventions, negotiated over time and imbued with conventional meanings" (Shaheed, 2011, p. 2). This is a new approach to culture that social epistemologists can develop further.

Consequently, contemporary social epistemologists can learn from Dewey's naturalist account of culture is in his provision for a natural explanation of the content and development of culture. This explanation is meant to serve two purposes- to redeem the content of culture from cultural biases and to provide some non-relative bases for human culture. He contends that,

Every type of culture has experienced resistance and frustration. These events are interpreted according to the bias dominating a particular type of culture. To the modern European mind they have been interpreted as results of the opposed existence of subject and object as independent forms of Being ... But the East Indian has envisaged the same phenomena as evidence of the contrast of an illusory world to which corresponds domination by desires and a real world due to emancipation from desires, attained through ascetic discipline and meditation. The Greeks interpreted the same experience on the basis of the cosmic discrepancy of being and becoming, form and matter, as the reluctance of existence to become a complete and transparent medium of meaning (J. Dewey, 1925, pp. 195-196).

Dewey's point is that culture is part of human experience and consequently is part of human transaction within nature. He rejects the explanation (or attribution) of *human differences* (as resistance and frustration) that are exhibited within culture in terms of forces outside human empirical transactions with nature as non-naturalist or idealist explanations. According to him, human differences exhibited within cultures are as integral and as important to the understanding of human transactions with nature as the understanding of the precarious and stable nature of nature is to the understanding of human/nature symbiotic relationship. For Dewey, these features exhibited by culture offer evidence for its continuity with nature. Nature is characterised by the mixture of precarious and stable events. This is Dewey's naturalistic explanation of the formation and development of cultures in terms of coordinated or collective responses to nature. For him, culture, with all its complexity, is an *instrument* for coping with nature. The nature and functions of culture are contingent upon these responses to natural challenges. Human species are social animals that need society to realise their full potential and the community relies on the differences among individuals to function. Finally, for Dewey, culture is not a tradition handed down from one generation to another but a dynamic, lived experience, or as Handler and Linnekin

rightly put it - a phenomenon that is “symbolically reinvented in an ongoing present”(Handler & Linnekin, 1984).

5.4 Chapter summary:

In this chapter, I examined social epistemology. I started with what various scholars meant by the qualification “social”. The differences in conceptions of the “social” were explored and shown to involve differences in conceptions of the nature, scope, methods, and goals of epistemology, on one hand, and the relationship between epistemology and other disciplines such as psychology and sociology, on the other hand. Consequently, what became the fundamental question that every social epistemologist must answer is whether social epistemology is a continuation of (but expanded) traditional epistemology or a new field that is closer to the social sciences than philosophy in methodology, paradigms and norms.

I identified two positions in the contemporary debate on social epistemology. Fuller and Kitcher were noted as defending the position that social epistemology is different from traditional epistemology. For instance, they have presented social epistemology as a new field that concentrates on social factors such as institutionalized bodies and institutions socially established for the establishment and applications of knowledge in societies. They have presented this point as one of the major factors differentiating this new field from traditional epistemology that is individualistic- concentrating on individuals and their cognitive activities. They also offered new definitions for concepts such as knowledge and normativity.

On the issue of normativity, for instance, I identified two approaches articulated by Fuller. The first approach is a rejection of normativity in social epistemology as it is considered as a descriptive sociological enterprise, a sub-field in social science. I rejected this approach because Fuller failed to show why social epistemology (construed in this sense) is not a mere duplication of sociology of knowledge in social sciences. I concentrated on the second approach in which Fuller attempted a reconceptualization of the concept of normativity in social epistemology. In this

second approach, which I regarded as more nuanced, normativity is regarded as *systematic in the sense that a conception of normativity is believed to run throughout all sciences*. What this implied is the rejection of the concept of normativity that is peculiar to traditional epistemology. Based on these contentions from Fuller and Kitcher which are meant to show that social epistemology is radically different from traditional epistemology, I argued that their position is radical.

Kornblith and Goldman were identified as defending the position that social epistemology is not a new field but continuous with traditional epistemology, with the primary purpose of establishing norms for distinguishing knowledge from mere beliefs, establishing the reliability of human cognitive apparatuses and refuting scepticism. This position establishes that social epistemology concentrates on both social factors and individual factors such as the activities of individual epistemic agents and the operations of their irreducible cognitive and psychological endowments. However, this position takes individual factors as primary because individuals are initiators of belief-formation processes as well as processes for belief-retention. Given the fact that both Kornblith and Goldman only admitted the need to expand the scope of traditional epistemology (to show more interest in social factors) while keeping the “basics” of the practices and preoccupations of the traditional epistemology (normativity, truth-tracking, refuting scepticism and so on), I argued that their position is moderate.

I also discussed some problems that confront protagonists on both sides of the debate. I articulated how a radical social epistemologist who concentrates on social factors (defined as independent of or supervening on individuals) and defines concepts such as normativity and knowledge in terms of the interests of specific societies will inevitably face a problem of relativism. This is because each social context with their different forms of life will defend whatever is endorsed in their society as knowledge even if it is incompatible with what is endorsed elsewhere as knowledge, whereas traditional epistemologists usually see epistemic norms as akin to logical rules in terms of universal application.

I also articulated the importance and indispensability of an interdisciplinary approach to issues in contemporary cognitive discourse and how this will affect a social epistemology that concentrates primarily on individual cognitive activities and their psychological endowments because they are irreducible or non-social. Consequently, I argued that both sides of the debate are reductionist positions, because they attempted to reduce social factors to individual factors and vice versa. Generally, I contended that the debate is better appraised as a stalemate and that this implied that both sides have not succeeded in showing either how social epistemology is different from sociology of knowledge or how it is continuous with traditional epistemology.

I have also shown how solutions to these problems can be found in the works of Dewey. I articulated the strategies used by Dewey in accomplishing this feat. Firstly, Dewey's naturalism enables him to account for all human activities either as direct transactions with nature (primary experience) or social purpose-oriented interactions among individuals (secondary experience). In this account, individual experiences gain enlargement, meaning and verification when they are considered in the light of wider or collective experience. From this narrative, the development of human experience and cognitive activities of individuals from private to public are empirically and experimentally accounted for in terms of social interactions actuated by common interest. I have also shown how Dewey's theories of inquiry, his conception of a community of inquirers and the denotative empirical methodology he recommended for epistemology further buttressed his account of the social dimension of knowledge. The point that runs through all these conceptions is that the human species are social animals who realise their full potentials in community and that the community relies on individual differences to function.

I explored several advantages of this naturalistic explanation. Firstly, the coherence, the simplicity, and the science-inclined nature of the naturalist ontological account of human existence in an environment that is challenging, prompting human species to embark on some manipulations of nature to survive, is appealing. The tension created by the disagreement among contemporary social

epistemologists on the primacy of social and individual factors, is abated. The empirical and naturalistic nature of the explanation makes social epistemology amenable to science. Also, the presentation of the history of human species as a single continuum (from irradiation of the senses to belief formation, knowledge evaluation and application) erases the boundaries between cognitive fields such as philosophy, psychology, biology, sociology and so on. An interdisciplinary approach to cognition and human action is encouraged.

I also articulated how Dewey's naturalist and instrumentalist account of knowledge provides a framework for a theory of knowledge that is not restricted to any specific social context. His instrumentalist account of knowledge states that knowledge is an instrument for manipulating the world for the survival of human species. Given his contention that at least some human natural transactions are universal, and his contention that some problematic situations do arise from these transactions that are global in scope, whatever secures solutions to these global problems is an instrument of knowledge.

Finally, I examined Dewey's contention that the human mind is a social and empirical phenomenon and how this claim opens up the aspect of humans most revered as private. I also examined his contention that in adopting his version of naturalism, all lived or esthetic human experience such as music, festivals, religions, magic and so on, are legitimate subject-matter of epistemology and science. I also articulated Dewey's cultural naturalism. This is a position through which his naturalist analyses of experience are extended to the conception of culture and makes it a subject for discussion among social epistemology rather than being the prerogative of social science. I contended that the enlargement of the subject-matter of epistemology and science to include these social activities hitherto labelled as non-philosophical or non-scientific is essentially important for social epistemology. I argued that these issues establish the uniqueness of Dewey as a social epistemologist.

Chapter Six:

Dewey and the contemporary debate on knowledge as a natural kind term

6.0 Introduction: From the metaphysics of natural kinds to the debate on knowledge as a “natural kind”

The debate among philosophers on the possibility of establishing knowledge as a natural kind is another important philosophical investigation to which Dewey’s instrumentalist and naturalist conception of knowledge can usefully contribute. While debates on the nature, types and importance of natural kinds have dominated the attention of metaphysicians and philosophers of science for a very long time,¹³³ the extension of this debate to the question of whether knowledge is a natural kind is relatively recent. Consequently, engaging Dewey with these contemporary epistemologists will provide a further way of demonstrating his continued relevance.

Many metaphysicians and philosophers of science have agreed that nature can be observed as having kinds. This simply means that there are entities we can observe as belonging to some definite groups in terms of properties they naturally have in common; properties they cannot lose without losing their common identity. The traditional view is that natural kinds can be differentiated from kinds that are artificially or purposefully grouped together by human beings. For Plato, we can “cut up each kind according to its species along its natural joints” (Plato, 1995, p. 265e). Philosophers such as Wilkerson have taken Plato’s metaphor of “carving” as suggesting that our best theories are those which carve nature at its joints

¹³³ For instance, Wilkerson has traced the long history of the concept of natural kinds to some doctrines in the work of Aristotle, revived by Locke and Leibniz (1995, p. 30). In addition, he sees Locke’s distinction between “substances” and modes”, objects capable of ‘subsisting by themselves’ and objects that are merely ‘dependencies on, or affections’ of others, respectively, as a “revival” of Aristotle’s distinction between independently existing substances and dependently existing non-substances (Wilkerson, 1995, p. 47).

(1995, p. 30). For Molino, we can think of a natural kind as a family of entities possessing properties bound by natural laws (2000, p. 168).

Philosophers who have agreed that there are natural kinds have identified paradigmatic examples in natural sciences such as biology, chemistry, and physics. In reference to botanical and biological sciences, there are two views on how natural kinds can be explained. There is a view that natural kinds can be understood in terms of taxonomy of plants and species of animals in which biologists generally place organisms into taxa on the basis of their “shared history” (Laporte, 2004, p. 64). The second view understands taxonomy on the basis of internal structure or “chromosome structures” (Kripke, 1980, pp. 120-121; Putnam, 1975, p. 240). In chemistry, “water” is regarded as a “chemical kind” sharing the “microstructural composition” known as H₂O (on earth) (Laporte, 2004, pp. 92-93) while Gold is regarded as the element with the atomic number 79 (Laporte, 2004, p. 95; Wilkerson, 1995, p. 31). In physics, physical properties such as quarks are regarded as constituting a natural kind.¹³⁴ These paradigmatic examples point to the fact that questions about natural kinds are ultimately ontological questions.

Philosophers have dominated the debate about the nature of natural kinds. Some have analysed the concept of “natural kinds” in terms of “real essence” or “as properties or set of properties”. However, while some philosophers contend that a natural kind (such as water) is determined in terms of a definite number of properties that are necessary and sufficient (oxygen and hydrogen) (Devitt, 2008; Elis, 2001; Wilkerson, 1995, p. 30) others have argued that not all kinds can be identified in terms of necessary and sufficient conditions. An alternative way of identifying kinds in terms of “clusters of properties” has become popular. This simply means that identifying membership of a kind is a matter of some significant properties they have in common that can mark family resemblance (N. Boyd,

¹³⁴ Quarks are regarded as particles because they lack any known internal structures and consequently are different from 3-dimensional objects (Cottingham & Greenwood, 2007). However, the combination of these particles to form composite objects are regarded as natural kinds.

1999a, 1999b). For instance, rather than classifying whales with fishes because they live inside water, they are classified as mammals because they give birth to and breastfeed their young ones, breathe lungs and are warm-blooded.

In contemporary philosophy of language and epistemology, there are two dimensions of discussion on natural kinds. In philosophy of language, there are debates about natural kind terms often associated with the works of Kripke and Putnam (Kripke, 1980; Putnam, 1975). In these debates, Kripke and Putnam challenge the descriptivist semantics often associated with Mill and Frege regarding how natural kind terms refer to natural kinds. For instance, in *Naming and Necessity*, Kripke describes natural kind terms as “rigid designators”. This simply means that, just as a proper name rigidly designates some particulars, natural kind terms rigidly specify the essence of a kind (Kripke, 1980, pp. 134 - 144). Secondly, there are debates on whether knowledge is a natural kind; an argument arguably pioneered by Hilary Kornblith. In this chapter, my focus will be on the second debate.

A good number of epistemologists have shown keen interest in the argument that knowledge can be established as a natural kind. By this they mean that knowledge can be recognised as part of the fabric of the world in the same way oxygen, water, stones, atoms, and hills are (Kornblith, 2002; Kumar, 2014; Millikan, 1993; Williamson, 2000). Consequently, knowledge can be described in the same sort of spirit which science described tuberculosis, acid or genes (Millikan, 1993, p. 242).

However, there are as many disagreements among scientists and philosophers of science on how to define or categorise natural kinds as there are disagreements among epistemologists on whether knowledge can be regarded as a natural kind. As noted by Laporte, some critics have challenged the tendency to see the classification of living things into biological species as paradigmatic natural kinds on the ground that “species” are “individuals” rather than “natural kinds”(Laporte, 2004). Wilkerson has also noted that critics have claimed that “the supposed biological kinds and even chemical kinds are not natural kinds because they are not really natural” (1995, pp. 8-9). In addition, Wilkerson noted that the supposed

rigid demarcations between kinds (and consequently the meaningfulness of the concept of natural kinds) might break down “if a natural kind is merely a kind with a real essence, and if a real essence is a mere property or set of properties necessary and sufficient for members of the kind, then there will be an enormous number of natural kinds”. For him, a table (for instance) will fall into some categories of natural kinds as much as we are able (in principle) to state the conditions necessary and sufficient for being a table (Wilkerson, 1995, p. 31).¹³⁵ More importantly, some epistemologists have also argued that knowledge cannot be regarded as part of the fabric of the world like atoms, oxygen and water on the ground that “knowledge” is *an evaluative term* and consequently is a human creation (Hernandez, 2015).

However, despite the many controversies among scientists, philosophers of science and metaphysicians concerning the nature and classifications of natural kinds, I will take it for granted that science has established that there are natural kinds. Consequently, rather than going deep into the controversies about the “reality” of natural kinds, in this chapter, I examine how epistemologists have tried to establish that knowledge has those characteristics often associated with natural kinds in the sciences. Such characteristics of natural kinds include; (i) a kind of classification imposed by nature and not by human beings (Markman, 1994, pp. 77-78), (ii) identification of kinds in terms of classes and their cognate members (Quine, 1994b, p. 61)¹³⁶, (iii) natural kinds as strictly products of empirical discovery (Kornblith, 2002, p. 12) and (iv) natural kinds as class of entities about which many inductive generalizations can be formulated (Machery, 2005, p. 445) or which characteristically lend themselves to scientific investigation (Wilkerson, 1995, p. 31).

¹³⁵ Wilkerson has now introduced some measures “to stiffen” the account of natural kinds. One is that “natural kinds must lend themselves to scientific investigations”. I will discuss these measures in the next section.

¹³⁶ Although Quine cannot be regarded as one of the protagonists in the contemporary debate about the nature of knowledge as a natural kind, his contribution to the debate, arguably, is influential, especially as an early attempt to establish natural kinds in terms of classes and cognate members.

I use two strategies in engaging Dewey's naturalist metaphysics and epistemology in the project of defending knowledge as a natural kind. First, I present one of the positions that offer a strong and comprehensible analysis for the claim that knowledge is a natural kind and explore how Dewey's views on natural kinds can be used to strengthen and critique it. A good number of philosophers have exploited different angles from which knowledge can be presented as a natural kind. However, it is notable that making references to facts about human evolution and adaptation is their common ground. Among these attempts, I concentrate mostly on Kornblith's account because his focus is more fundamentally on epistemological concepts such as belief, truth, and justification and how they are related to human traits, behaviour and actions. Other philosophers, Kripke (1980); Kumar (2014); Putnam (1975); Soames (2014); Ziff (1960) have followed a semantic or linguistic path in bringing this issue to bear on the question of knowledge.

Consequently, I articulate Kornblith's argument that defining features of natural kinds in science are identifiable in the concept and nature of knowledge. In addition, given that the position of Kornblith on knowledge as a natural kind will be my central focus, I compare the feasibility of Kornblith's position with Dewey's position in terms of how to identify and articulate those characteristics. The focus is on how Kornblith's position can be strengthened or weakened by Dewey's theses such as his "traits of existence" and "genetic classifications". Consequently, on the positive side, I articulate how Dewey's position can better address three objections often raised against Kornblith's position. The first objection is from Goldman who argues that because knowledge involves context-sensitive dimensions, while natural kinds are universal, knowledge cannot be a natural kind (2007, p. 17). The second objection is that knowledge is not a natural kind because it involves application of concepts (Machery, 2005). The third is that knowledge is not a natural kind because it is an evaluative term (Hernandez, 2015). However, on the negative side, I consider some objections that can be raised against Kornblith's position from Dewey's views about natural kinds.

In the second strategy, I argue that Dewey's focus is on "knowledge as natural transactions". This is an approach that is arguably different from Kornblith's contention that "knowledge is a natural kind". A way of engaging these philosophers with each other is to articulate the goals behind Kornblith's endeavour to establish knowledge as a natural kind and evaluate both positions in terms of how well they do in achieving these goals. I argue that Kornblith's aim is to establish a scientific epistemology. With this formulation, the target is to present Dewey's claim as an alternative and a more viable way of achieving Kornblith's purpose.

Consequently, this chapter has four sections. In the first, I briefly discuss natural kinds in the natural sciences. I focus on the examples of natural kinds that are regarded as paradigmatic and the advantages of having knowledge of natural kinds. In the second section, I discuss Kornblith's position on knowledge as natural kind. This is a position that I defend as being more detailed. The third section focuses articulating arguments in Dewey's work that can be used to defend the claim that knowledge is a natural kind. The fourth section focuses on articulating Dewey's contention that "knowledge is human transaction within nature" as a more viable way of establishing a science-inclined epistemology compared to Kornblith's contention that knowledge is a natural kind.

I conclude the chapter by contending that the most important reason epistemologists such as Kornblith were interested in establishing knowledge as a natural kind is to promote an epistemology that does what the sciences are doing; the establishment of scientific knowledge. Consequently, showing that Dewey's naturalist metaphysics and epistemology offer a more promising prospect for a normative scientific epistemology demonstrates that engaging Dewey with current issues in epistemology offers a good way to bring Dewey to life in contemporary philosophy. I start the discussion by exploring the notions of natural kinds in natural and social sciences.

6.1 Paradigmatic natural kinds in natural and social sciences.

The debates on the nature and types of natural kinds are deeply rooted in the works of metaphysicians and philosophers of science who often refer to the classical works of Plato and Aristotle on issues such as the nature of Universals, Particulars and Essences. Questions are raised about whether we can identify natural kinds in terms of having essences, properties (Devitt, 2008; Ellis, 2001). Characteristics of natural kinds are often compared with the attributes of Universals and Particulars such as being self-generating or reducible to other entities (Armstrong, 1978; Lowe, 1998). These debates are also popularised by philosophers preoccupied with theories of meaning and reference (Kripke, 1980; Putnam, 1975; Ziff, 1960).

However, I do not go deeply into these debates. Rather, for present purposes I focus on how in these debates, classifications into kinds in the natural sciences (such as biology and chemistry) are taken as offering paradigmatic cases of natural kinds. For instance, in Chemistry, H₂O is an example of a natural chemical compound. It is a natural kind in the sense that its classification is a molecular formula. It is also different from man-made stuff such as the artificially synthesized ascorbic acid (vitamin c) (B. Alexander, 2008). In biology, biological species have been regarded as paradigmatic natural kinds. The traditional view concerning the classification of natural kinds in these natural sciences has been that there are intrinsic natural properties that are individually and jointly sufficient for a particular to be a member of a kind (B. Alexander, 2008; R. N. Boyd, 1988, p. 196). Consequently, we have H₂O (combination of hydrogen and oxygen) indicating the necessary and jointly intrinsic natural properties of water in chemistry. In biology, mammals are believed to have certain biological properties (such as neocortex in the brain) that necessitate the grouping of human beings and apes together with bats and whales as mammals even when in human description, there are more inclinations to classify whales as fish and bats as birds.

However, there are some facts that I think one should note concerning historical development in the study of natural kinds *en route* to our consideration of

knowledge. First, there are several fundamental differences between what I call the “traditional view” and the “contemporary view” concerning what is required of a natural kind. A typical example is found in Boyd’s conception of some natural kinds which he argued are best described as having “homeostatic property-cluster” definitions. According to him, these natural kinds are “open-textured” in the sense that “there is some indeterminacy in extension legitimately associated with property-cluster or criterial attribute definitions. Consequently, “properties in the cluster are differently weighted” and membership of a kind are determined by “the possession of an adequate number of these properties [that] is sufficient for falling within the extension of the term (R. N. Boyd, 1988, p. 196).¹³⁷

I take this position to be a radical challenge to the traditional view that for a particular to be a member of a kind, it must possess some intrinsic natural properties *that are both necessary and sufficient for its kinds*. Another view that I will present as a “contemporary view” is found in the developing field of writers who are challenging the impression of “physical properties” that is usually created when natural kinds such as “water” (H₂O), “gold” (malleability) or “species of mammal” (biological properties such as genes, reproductive characteristics) are classified. Writers have started discussing the possibility of non-physical properties or non-physical psychological or mental systems serving as natural kinds (R. Cooper, 2006, 2008; Groff, 2008; Mitchell, 2009).

For instance, Mitchell argues that the adoption of the methods of cognitive science has assisted social psychologists in the discovery of previously unsuspected correspondence among many important phenomena at the core of the field; that “a common functional anatomy, centred on the medial prefrontal cortex”, forms a natural group of domains for approaching interpersonal understanding such as emotion, attitudes, and the self (Mitchell, 2009, p. 246). These are domains that

¹³⁷ Boyd cited the example of biological species as the reason for modifying the classification of natural kinds in terms of possession of necessary and sufficient properties. According to him, “properties which determine the conditions for falling under *t* may vary over time (space), while *t* continues to have the same definition. To fall under *t* is to participate in the (current temporal and spatial stage of) the relevant property clustering” (R. N. Boyd, 1988, pp. 217-218).

are often thought of as having little in common. These findings, for Mitchell, “suggest a view of social psychology as a unique branch of cognitive science, specialized for examining a distinct and natural grouping of approximate, shifting, and internally-generated- in other words, ‘fuzzy’- cognitive operations” (2009, p. 246). He concludes that social psychology is a natural kind. Cooper makes similar claims about the existence of psychological kinds (2008). Similarly, Engelskirchen contends that there are social kinds. He argues that social structures, as causal mechanisms, exhibit emergent dispositional properties that legitimately are social kinds (Engelskirchen, 2008). For Panksepp, emotions are natural kinds. For him, emotions arise from “coherent brain operating systems” and these systems “orchestrate and coordinate a large number of output systems in response to specific inputs (Panksepp, 1994, pp. 23-24). For him, “these systems constitute the core processes for the “natural kinds” of emotion” (Panksepp, 2000, p. 143). What is common among these positions is that there are some psychological systems or social structures that render some psychological phenomena and some dispositional properties natural kinds, respectively, by virtue of creating or providing natural convergence points for studying and grouping them.

While acknowledging that these positions are far from uncontroversial, I will not discuss them in detail.¹³⁸ For present purposes, I only need to state scholars’ contentions that there are psychological and social kinds that can be contrasted with paradigmatic examples of natural kinds in natural science. There are four important points to be noted concerning these natural kinds in social sciences: (i) There are psychological and social kinds (ii) Some psychological systems and social structures provide distinct and natural ways for grouping or linking certain psychological and social phenomena together (iii) The “membership” of these kinds (for instance, cognitive phenomena such as self-referential, attitudinal, affective and other social phenomena, converging in common functional neuroanatomy, centered on the media prefrontal cortex) are internally generated

¹³⁸ For instance, Barret argues that some empirical evidences that are meant to support the view that there are kinds of emotion with boundaries that are carved in nature, are inconsistent. Consequently, he considered the plausibility and what advantages, “moving beyond a natural-kind view” might engender for the scientific understanding of emotion (Barret, 2006).

cognitive operations and consequently are not conceived in terms of physical properties, (iv) These psychological and social kinds are emergent (non-physical) properties; dispositional, approximate groupings and consequently fuzzy. In other words, in a way similar to Boyd's definition of kinds in terms of clustered mutually re-enforcing properties, they are mutually entailing psychological and social domains.

Another important fact to note about discourses on natural kinds is what has been conceived as the purpose of studying them. For instance, the knowledge of natural kinds has been regarded as indispensable in our process of inferential (inductive) justification (Markman, 1994, p. 82; Quine, 1994b, p. 57). Consequently, it is envisaged that the establishment of natural kinds will engender the formulation of more reliable inductive generalizations (Machery, 2005, p. 445). For philosophers such as Quine, the identification of natural kinds is an essential preoccupation of science (Quine, 1994b). For him, science aims at discovering the structures that underlie superficial observable properties. Besides, he believes that every successful identification of these underlying structures are pointers to progress in science (Quine, 1994b, p. 72). I turn to Kornblith's approach in presenting knowledge as a natural kind, and consider whether his position is successful in rendering epistemology a scientific discipline.

6.2 Kornblith's paradigmatic conception of knowledge as a natural kind

In this section, I discuss two strategies that Kornblith concentrates on in his presentation of knowledge as a natural kind and then consider their success. Firstly, he draws an analogy between human knowledge and the knowledge of lower animals, which is the subject-matter of cognitive ethology. The motive is to present animal knowledge (both human and non-human) as an empirical phenomenon and a subject-matter within the framework of scientific investigation. Secondly, he uses cause-effect analysis in presenting knowledge as a natural kind. He contends that animals' knowledge of their environment is instrumental in producing certain behaviour necessary for survival. However, I contend that some clarifications are needed to make Kornblith's position more

comprehensive. For instance, I contend that Kornblith needs to explain the role of rational choice (in contrast to what nature imposes on human cognitive behaviour) in the process of justifying our beliefs before they become knowledge.

I also discuss some objections raised against Kornblith's position. For instance, I discuss Goldman's argument that knowledge has a context-sensitive dimension and consequently cannot be a natural kind (Goldman, 2007). Machery also rejects the idea of knowledge as a natural kind on the ground that it concerns the application of concepts (2005). Consequently, I explore whether Kornblith is presenting knowledge as a natural kind in terms of a physical entity with properties, or else a kind of non-physical property or non-physical psychological or mental system, as argued by Mitchell (2009), R. Cooper (2006) and Groff (2008).

6.2.1 The analogy of human knowledge and the subject-matter of cognitive ethology

In *Knowledge and Its Place in Nature*, Kornblith sets out to argue that knowledge is a natural kind. He employs an analogy between the preoccupations of cognitive ethologists who study lower animal knowledge and naturalized epistemologists who study human knowledge, in order to advance three significant claims: (i) all animal knowledge (whether higher or lower) is an instance of a single kind, (ii) there is a legitimate scientific category of animal knowledge, (iii) this scientific category is of philosophical interest (Kornblith, 2002, p. 29).

In his attempt to show the preoccupation of cognitive ethologists with animal behaviour as constituting a proper "epistemological investigation", Kornblith writes:

Cognitive ethologists use a rich vocabulary of intentional idioms in describing animal behaviour. One standard textbook, John Alcock's *Animal Behaviour*, has section headings referring to 'hiding from', 'spotting', 'evading' and 'repelling' predators. Wolves are described as chasing a herd of caribou or a number of solitary moose 'before finally selecting a vulnerable individual to attack'. Hunting dogs are described as having an 'intended victim'. Rats, Alcock comments, 'avidly explore areas around their burrows to learn the salient features of their habitat, information that will be of more than passing interest to them if pursued by a predator' (Kornblith, 2002, p. 30).

What Kornblith is pointing to is purpose-oriented activities in animal behaviour. This is a radical challenge to philosophers (such as Rene Descartes and T. H. Huxley) who have argued that animal behaviours are automatic. Kornblith buttresses his point by making a distinction between animal behaviours that are categorised as “bodily motions” (e.g. moving of the beaks, wing-flapping) and those that are categorised as “signifying intentional states” (e.g. planning against impeding attack from predators). Kornblith points out that it is possible to describe all animal activities or behaviours in terms of “bodily motions” or in non-intentional terms. Viewed in this way, all these behaviours will look entirely heterogeneous. However, he contends:

It is only when construed intentionally that otherwise heterogeneous bits of behaviour may be seen as instances of a single kind. Our recognition that ravens work co-operatively with one another to distract other birds and steal their food allows us to explain and predict subsequent behaviour, thereby providing us with explanations and predictions that we would not have were we to limit our descriptions of the behaviours to non-intentional terms. The non-intentional descriptions fail to capture what it is that the various behaviours have in common. We lose our ability to recognize subsequent repetitions of the same behaviour if we insist on characterizing it as bits of bodily motion (Kornblith, 2002, pp. 33-34).

Kornblith suggests that cognitive ethologists are able to articulate “animal knowledge” by doing two things: (i) separating those behaviours of animals that fit into the patterns of non-intentional descriptions and those that fit into the patterns of intentional descriptions, (ii) recognising that the behaviours so described in intentional terms involve “information-processing tasks” which require the possession of some “internal states with informational content” (Kornblith, 2002, p. 36).

How does the study of “animal knowledge” provide a template for arguing that human knowledge is a natural kind? For Kornblith, the answer lies in the fact that the distinctions between “bodily actions” and “intentional actions” in the life of “lower animals” applies to “higher animals”. For him, the objection that one form of life is higher or more social than the other, or that the study of human knowledge is philosophically more interesting than the other, do not alter certain fundamentally similar patterns between the two (Kornblith, 2002, p. 29). His focus

is on those basic and raw needs that human beings naturally share with animals (need for food, need to escape dangers or survival and so on) and not “theoretical sophistications” that mark humans’ transition from mere information-bearing states to full-fledged belief formation (formation of theories, seeking error-free knowledge, and so on).

For him, animals’ knowledge of their environment is instrumental in producing certain behaviour necessary for survival:

The environment places certain informational demands on an animal. If it is to satisfy its biologically given needs, it will need to recognize certain features of its environment and the evolutionary process must thereby assure that an animal has cognitive capacities that allow it to deal effectively with that environmentOnce we recognize the existence of internally represented animal needs together with representations of features of the environment, we have the beginnings of a belief-desire psychology (Kornblith, 2002, pp. 37-38).

He concludes that:

[A]nd it is thus that the category of beliefs that manifest such attunement -cases of knowledge-are rightly seen as a natural category, a natural kind (Kornblith, 2002, pp. 62-63).

The argument stated above understands animal knowledge as an empirical affair, and “human knowledge” as inherently based on biological and environmental necessities. Consequently, resources in biological, ecological sciences and natural history are indispensable in any attempt to understand it. The strength of this position lies in locating animal knowledge within evolutionary theory. This aspect of animal life (including human) is arguably universal. Several advantages of this position seem obvious. Firstly, as rightly noted by Kumar, if knowledge is identified with a kind of mental state, then it is legitimate to talk about “its constitutive psychological properties” (2014, pp. 441-442). Secondly, it presents knowledge as an empirical fact that concerns human activities meant for common goals such as survival of the human species. These goal-oriented activities provide a platform from which some reasonable inductive generalizations about general human knowledge can be made. With nature identified as the “cause” of certain natural processes that bring about certain animal mental states with certain constitutive

psychological properties, it is arguable that generalizations can be made on those processes and those mental states in a way that scientists generalize and predict concerning natural kinds. I now discuss some objections to Kornblith's position and to what extent his responses shed light on his position.

6.2.2 Some objections to Kornblith's conception of knowledge as natural kind

Edouard Machery raises two objections against the idea that knowledge is a natural kind. First, he contends that knowledge is about applications of *concepts*.¹³⁹ Given that concepts are created by humans, it follows that they cannot be regarded as part of nature. For him, concepts such as knowledge and population are kinds in terms of their formation and application but are non-natural kinds. Secondly, he contends that application of concepts do not constitute a homogeneous kind. For him, "the bodies of knowledge that are used by default in our higher cognitive processes do not constitute a homogenous kind about which many inductive generalizations can be formulated" (Machery, 2005, pp. 44-45).

Kornblith's response to Machery's first objection is that the preoccupation of epistemologists does not end with how the concept of knowledge is applied but extends to how it is formed; as a consequence of natural occurrences (such as evolution). It is in this sense of how nature necessitates human cognition that philosophy ultimately is continuous with the sciences. In the epistemological segment of this continuum, the impact from nature is contrasted with the influence of society in the formation of concepts. However, for Kornblith, focusing on concepts, independently of other factors, will create a theory of knowledge that may be "importantly incomplete or importantly mistaken or both" (Kornblith, 2002, p. 163).¹⁴⁰

¹³⁹ For Machery, "Concepts are the bodies of knowledge that are stored in long-term memory and are used by default in the higher cognitive processes (categorization, inductive and deductive reasoning, analogy making, language understanding, etc.)" (2005, pp. 44-45).

¹⁴⁰ Kornblith challenges those who favour a view of philosophy as conceptual analysis on the ground that if their goal is to preserve the autonomy of philosophy, the purpose is defeated because they have to explain how philosophy differs from cognitive anthropology (2002, pp. 162-

In response to Machery's second objection, Kornblith argues that inductive generalizations can be formulated from three important aspects of animal knowledge. First, we can generalise from informational demands that the environment makes on its inhabitants. These are "demands that nature makes on animals if they are to function in their natural environment". Second, we can generalise from cognitive capacities of animals; as means by which evolution responds to these demands. Third, we can generalise from how these responses give rise to the category of knowledge (Kornblith, 2002, p. 164).

Goldman raises several arguments against Kornblith's idea that knowledge is a natural kind. First, he argues that "knowledge has context-sensitive dimensions". He cites the example of how "the exact standard for knowledge varies from context to context" and points out that "it seems unlikely that natural kinds have contextually variable dimensions" (2007, p. 17). He concludes that "this renders it dubious that any natural kind corresponds to one of our ordinary concepts of knowledge" (2007, p. 17). Kornblith's response is that neither the social dimension of knowledge nor its context sensitivity rule out its place in nature. For him, knowledge as a natural kind "enters our theoretical picture at the level of understanding of the species", rather than the individual (Kornblith, 2002, p. 57) or social conceptualizations (Kornblith, 2002, p. 165). His argument is that if the nature of human knowledge rests upon characteristics of the human species or is determined by the mechanisms responsible for evolutionary changes in human environment, then Goldman's argument loses its bite. Moreover, Goldman admits being sympathetic to Kornblith's rejection of the notion that belief possession requires the social practice of giving and asking for reasons, and the notion that knowledge requires induction into a linguistic community (Goldman, 2005, p. 48). These two agreements suggest that their major disagreement is not on the social nature or context sensitivity of knowledge.

163). In spite of Goldman's disagreement with Kornblith's idea of knowledge as a natural kind, both ultimately agree that although conceptual analysis (as an a priori inquiry) constitutes an indispensable segment of the field of epistemology, it does not exhaust it (Goldman, 2005, pp. 407-408).

What exactly is Goldman's worry about Kornblith's position? It is arguable that he is not challenging the latter's account of mechanisms for belief production, because both scholars agree on the importance of reliable mechanisms or processes there. Both subscribe to reliabilist epistemology (Goldman, 1992; 2005, p. 408; 2014; Kornblith, 2002, pp. 63-69). In addition, he is not challenging Kornblith's account of the impacts of evolution on these mechanisms because both invoke the relevance of evolutionary theories on numerous epistemological issues (Goldman, 1986). Does the worry concern the idea of seeing human knowledge from the perspective of cognitive ethology? I think the major issue is Goldman's critique of how Kornblith links the concept of knowledge in cognitive ethology with the philosophical account of human knowledge. This is the point I will explore. For Goldman,

Kornblith argues carefully for the thesis that belief is a natural kind instantiated by animals. So perhaps knowledge is just belief; it is that natural kind. How is cognitive ethology supposed to adjudicate this issue? How is it supposed to decide that, no, knowledge is a different natural kind, inclusive of belief but more? ... Where does the assertion that knowledge is "more than just true belief come from? What licenses it? Surely it doesn't come from cognitive ethology. It would have to come, one supposes, from a semantico-conceptual account of the term 'knowledge' (Goldman, 2005, p. 407).

Goldman's objection is that before Kornblith's argument that knowledge is a natural kind can make sense, it must first present a theory of knowledge that is defensible. However Kornblith's position fails to differentiate between knowledge and belief. If what humans and lower animals *naturally have in common are beliefs*, then Kornblith's position does not meet the traditional definition of knowledge as transcending mere belief. Put differently, Goldman's argument is that Kornblith plays down the usual distinction between human rationality or reflective capacities and those of other animals and the rating of their knowledge as higher and lower level, respectively. According to this view, humans engage not only in self-criticism but also engage one another in the practice of asking for and giving reasons, which leads to the establishment of standards of justification among members of a community of inquirers. This practice, Goldman insists, is conspicuously absent among lower animals. The human system of language,

characterised by well developed semantics, symbols and concepts, is regarded as responsible for this difference. The consequence is that Kornblith's analogy between human and animal knowledge breaks down.¹⁴¹

In response, Kornblith rejects the idea that humanity's ability to reflect differentiates their knowledge from the knowledge of lower animals.

...while it is true that humans are capable of intellectual activities which other animals are not, I argue here that human knowledge and the knowledge of non-human animals is not different in kind, and that human knowledge requires no sort of reflection at all (Kornblith, 2002, p. 106).

What exactly is Kornblith denying? There are three suggestions. Firstly, he seems to be denying that human reflective capacities play any substantive role that could warrant the distinction between animal and human knowledge. In lieu of seeing knowledge as reflective, we can see "philosophy as a thoroughly empirical discipline" (Kornblith, 2002, p. 170). It is arguable that Kornblith cannot be defending this view because it is obviously false.

Secondly, he seems to be suggesting that the ability to form beliefs is not the prerogative of humans. From this suggestion, the fact that lower animals do not have a semantico-conceptual framework nor are they social in terms of engaging in the practice of giving and asking for reasons, does not render them incapable of reflection. The point is that the formation of beliefs is fundamentally rational or reflective; whether formed by humans or animals. For instance, Kornblith writes:

Just as a proper description of the psychology of animals requires that we see them as creatures having beliefs, a proper understanding of the cognitive capacities of animals requires that we see them as a means by which evolution responds to the informational demands that the environment makes on its inhabitants, and this in turn gives rise to the category of knowledge. The standards that a belief must answer to if it is to count as knowledge are not some sort of social construct; the standards for knowledge arise from the demands that nature makes on animals if they are to function in their environment (Kornblith, 2002, p. 164).

¹⁴¹ The charge that Kornblith equivocates between these two notions of knowledge was also raised by other critics such as Pernu (Pernu, 2009, p. 374).

The point here is that the formation of beliefs is a natural phenomenon caused by forces such as evolution and environmental demands from which all animals develop certain habits and behaviours and carry out activities guided by them. Consequently, what makes a belief “reflective” or “rational” is not necessarily being formed socially but the specific purposes it was formed for, and the modality that is employed in using it as means to ends. Consequently, the seasonal migration of birds and animals, numerous activities meant to guarantee their safety against predators, their selective mating for healthy procreation, and other activities for survival, are legitimately to be regarded as belief-based. In addition, they are rational beliefs as far their purposes are concerned. The problem with this suggestion is that Kornblith seems to have presented an account of how beliefs formed by animals can be argued to be true and not how these true beliefs amount to knowledge. Kornblith seems to have introduced a notion of belief that does not need to meet the third condition of knowledge which is known as the justification condition in traditional epistemology. I discuss this point in section 6.2.3.

Thirdly, Kornblith seems to be suggesting that it is wrong to start our investigation of human knowledge from reflective capacities or activities of human beings, that there are stages in the development of human knowledge that precede the use of human reflective activities. That these stages shared by all animals, constitute more natural and fundamental grounds for understanding animal knowledge (in general). Thus, Kornblith sees nature/animal symbiotic relations as preceding human higher order reflective activities. It is arguable that this is the Deweyan side of him. There are several passages that show Kornblith’s commitment to this suggestion. For instance, according to Kornblith,

Cognitive ethologists are interested in animal knowledge precisely because it defines such a well-behaved category, a category that features prominently in causal explanations, and thus in successful inductive predictions. If we wish to explain why it is that members of a species have survived, we need to appeal to the causal role of animals’ knowledge of their environment in producing behaviour which allows them to succeed in fulfilling their biological needs. Such explanations provide the basis for accurate inductive inference (Kornblith, 2002, pp. 62-63).

Kornblith's point is we need to understand: (i) how external factors influence these mechanisms (stimulation of the senses, need to adapt to environmental changes, and so on), (ii) the internal structures and functioning of the organs or mechanisms involved in nature - human interactions (the brain, senses) and (iii) the reactions or responses of animals (the patterns of behaviour, habits, or choice). Kornblith derives three points from this perspective. First, we have an explanation for animal behaviours that is based on cause-effect analysis, predictable and arguably rational. Second, epistemology or whatever discipline studies animal knowledge is unavoidably in collaboration with other sciences that study how animal cognitive endowments and capacities are naturally formed and developed (such as cognitive science, evolutionary psychology, and neuroscience). Third, we have a general basis for discussing animal reflective capacities or rationality although these do not erase the differences between higher or lower order levels of rationality or reflective capacities among animals.

Although it is arguable that Kornblith provides a general basis for animal reflection or rationality in such a way that makes Goldman's challenge about the relevance of cognitive ethology to human knowledge lose its bite, in section 6.3, I compare Kornblith and Dewey's account of the advent and role of human reflection in the development of human knowledge and argue that the latter poses a challenge to the former in terms of its indispensably social nature. This social nature will be explained in terms of the collaborative nature of reflective inquiry. This is a factor that arguably separates human knowledge from animal knowledge. However, before considering that, more objections to Kornblith's position will be considered.

Critics such as Goldman argue that Kornblith's notion of knowledge as a natural category is not clear. Critics will agree with Kornblith that evolution plays active role in the (re)formation of human cognitive mechanisms and formation of beliefs but still contend that evolutionary impacts are not the same in all contexts and beliefs are sometimes formed differently. While natural kinds in science are arguably stable (in terms of continuity of identifying features), knowledge is relative and dynamic. The question is how are the kinds of knowledge determined? If Kumar's suggestion is correct that Kornblith sees knowledge as "a mental state

with concrete psychological causes and effects” (Kumar, 2014, p. 40), that “can be reduced to its constitutive psychological properties” (Kumar, 2014, pp. 241-242), it is arguable that psychological properties or mechanisms that produce knowledge are not knowledge. Besides, it is arguable that human knowledge is not *naturally produced* in the manner that some new species are produced or the features of some species modified by natural selection - without human agency.

It should be noted that the objection from these critics is not about knowledge being an intangible or non-concrete phenomenon while other paradigmatic natural kinds have concrete properties. For instance, Mitchell rejects the conception of properties of natural kinds as essentially physical or material in her argument for the existence of psychological kinds. She argues that there are psychological systems that provide natural domains for seemingly disparate psychological phenomena such as self-referential, attitudinal, affective and other social phenomena; making them members of a kind (Mitchell, 2009, p. 246). Consequently, one can say that the objection of these critics concerns some kind of explanatory gap between Kornblith’s conceptions of ‘belief’, ‘knowledge’ and ‘kinds’.

In Kornblith’s account of knowledge as a natural kind, Boyd’s view of natural kinds is evident. Kornblith writes:

I take natural kinds to be homeostatically clustered properties, properties that are mutually supporting and reinforcing in the face of external change. Consider the case of water. Water is just H₂O. Why does H₂O count as a natural kind? Two atoms of hydrogen and one of oxygen unite to form a homeostatic cluster. The chemical bond that joins these atoms provides the newly formed unit with a degree of stability that is not found in just any random collection of atoms... The reason natural kinds support inductive inference is that the properties that are homeostatically clustered play a significant role in producing such a wide range of associated properties, and in thereby explaining the kind’s characteristic interactions (Kornblith, 2002, pp. 61-62).

Kornblith further argues:

The various information-processing capacities and information-gathering abilities that animals possess are attuned to the animals’ environment by natural selection, and it is thus that the category of beliefs that manifest such attunement -cases of knowledge-are rightly seen as natural category, a natural kind (Kornblith, 2002, p. 63).

The most important point here is the idea of homeostasis. According to this idea, while there may be different behaviours and traits in different social contexts and consequently different forms of knowledge, it is arguable that the natural or evolutionary constraints are similar. Kornblith sees these “natural constraints”, which he called “the belief-desire psychology”, as a kind of “homeostasis” which serves as the “cause” of different forms of human knowledge (2002, pp. 28-69).¹⁴² More importantly, this “homeostasis” is also responsible for changes and “stability” in all forms of knowledge across cultures and time. This is a characteristic that is not found in merely true beliefs.

In addition, as pointed out by Kumar in his defence of Kornblith, taking knowledge as a natural kind does not entail that knowledge is whatever we take to be knowledge. “Paradigm cases of knowledge must support the causal/explanatory roles assigned to knowledge in our best empirical understanding of the mind” (Kumar, 2014, p. 456). For him, whether a belief is true, justified or reliably produced, has “no immediate effect upon a subject’s physical environment” unless it involves human actions that are directed towards his interests (Kumar, 2014, p. 441). Kornblith and Kumar are specific on what this interest is - what enhances the survival of the animal species. Consequently, the major argument is that the survival of animals (or their successful adaptation) in their environment is fundamentally due to successful behaviour. For him, “animals’ knowledge of their environment” plays a causal role in the choice of behaviour that allows them to fulfil their biological needs. For him, only knowledge guarantees the possibility of successful behaviour because it is necessarily or ultimately in accordance with facts. Philosophers such as Quine have made a similar point.¹⁴³

How does this cause-effect explanation connect with the concept of knowledge? Kornblith’s answer is that knowledge is closely connected with *successful human*

¹⁴² Ellen Markman, for instance, argues that one of the most distinctive characteristics of natural kinds is the remarkable richness of their correlated structure (1994, p. 77). What she means by this point is that the properties that make up a natural kind are closely associated. This relationship was usually defined in terms of necessity and sufficiency until Boyd introduced the notion of homeostatic cluster property.

¹⁴³ W.V.O. Quine, for instance, wrote that “creatures inveterately wrong in their inductions have a pathetic but praiseworthy tendency to die before reproducing their kind” (Quine, 1994b, p. 66).

actions. The fact that this success must be consistent to bring about the continued survival of the animal species, cannot be over-emphasised. Justification is defined in terms of how a behaviour or trait has led to the successful navigation, adaptation, and survival of the species. Kornblith's contention is that these characteristics are found wanting in false beliefs. In Kumar's exploration of Kornblith's view, he argues that true belief is more likely than false belief to lead to successful action "because it enables one to capitalize on genuine causal relations that are instrumentally relevant to the satisfaction of desires and interests" (Kumar, 2014, p. 441).

However, there are two questions for Kornblith. Firstly: What about true beliefs that are not known? How do we account for their influence on successful human actions or established traits? This is the hard case for Kornblith. Secondly, Kornblith and his supporters rely on cause-effect analysis to link the 'naturalness' of knowledge with successful human adaptational actions and retention of traits on one hand, and the dictates of evolutionary process on the other hand. However, Kornblith must contend with the position of philosophers such as Hume, Kant and Wittgenstein who have rejected the idea that justification is the same as causation.¹⁴⁴ Contemporary philosophers such as Keith Lehrer have described theories that allow for causal considerations as a causal fallacy.¹⁴⁵

In response, I think we need to extricate Kornblith's position from several closely related epistemological positions. One way of doing this is to explore his notions of reflection and belief and how they suggest that his position is distinct from traditional epistemology and modern epistemological theories such as reliabilism. For present purposes, I concentrate on his notion of belief and explore how it provides a theory of animal knowledge in which: (i) there is no need for the knower to be aware of all her true beliefs and (ii) the traditional demarcation between

¹⁴⁴ For instance, Wittgenstein follows Hume's idea of causation by stating that our best causal account cannot make space for the basic normative distinction between what is justified or not justified. In his words, "superstition is the belief in the causal nexus" (See fragments 5.135-5.1362, 6.3, 6.36311-6.372, Wittgenstein, 1922).

¹⁴⁵ Lehrer argues that such theories "confuse the reason a person has for believing something with the cause of his believing it" (1990, p. 169).

justification and causation becomes insignificant.¹⁴⁶ My contention is that understanding these differences can enable a deeper understanding and a more critical appraisal of Kornblith's position.

6.2.3 Understanding Kornblith's naturalist theory of knowledge as a rival to mainstream epistemology

Kornblith's conception of the category of belief *as an important causal/explanatory category in psychology*, is one of the most important frameworks upon which his entire position rests. The importance lies, most significantly in how the causal and explanatory roles attributed to 'beliefs' in psychology, is essential for 'philosophical' understanding of the category of animal knowledge. What are the peculiar features in the psychological notion of belief that are important for his position? What are the peculiarities in the philosophical notions of belief that are hindrances?

As noted by Eric Schwitzgebel, beliefs in philosophy represent our attitudes to what we take to be the case. However, he emphasises that the standard philosophical usage does not imply any uncertainty, any active or extended reflection about the matter in question (Schwitzgebel, 2015). Three important facts are to be noted. Firstly, beliefs are personal or private opinions or, in epistemological terms, they are personal attitudes to propositions. Beliefs, naturally, are uncritical and unstable. Secondly, there is a distinction between beliefs and knowledge in the sense that, while a belief can be true or false, true/falsity do not apply to knowledge. Thirdly, in the process for justifying a belief, the one who believes is expected to show that it is true and justified before it can be regarded as knowledge. This process is usually described as the practice of asking and giving reasons for holding a belief.

We now turn to notions about beliefs in psychology. An insightful comparative approach to definitions of beliefs in psychology is provided by Nathan McCullough

¹⁴⁶ In a way, it is arguable that both (i) and (ii) bear on the consciousness or awareness of the knower about her knowing state. However, for clarity sake, I will keep the issues separate.

(2012). He cites Richardson's definition of beliefs in terms of "psychologically held understanding, premises, or propositions about the world that are felt to be true" (Richardson, 1986, p. 103). He also cites Sigel, who defines beliefs in terms of "mental constructions of experience, often condensed and integrated into schemata or concepts that are held to be true and guide behaviour" (Sigel, 1985, pp. 83-103). He also cites Abelson, who defines beliefs "in terms of people manipulating knowledge for a particular purpose or under a necessary circumstances" (Abelson, 1979, pp. 355-366). However, the description of beliefs in psychology that shows a contrast with its meaning and usage in philosophy was given by Jonathan Leicester who stated that in psychology "the purpose of belief is to guide action and not to indicate truth" (2008).

Four points are notable concerning these notions of beliefs in psychology. Firstly, seeing beliefs in terms of "integrated schemata", diagrams or mental constructions of the world is different from having attitudes to propositions. The second point follows from the first; the distinction between beliefs and knowledge in psychology is not as radically distinct as it is in philosophy. The third is that the well-noted interest of epistemologists in distinguishing between true beliefs and false ones is not a priority in psychology. The fourth and most important notion concerning beliefs in psychology is that, they are regarded as indispensable in causal explanations of the presence of behavioural patterns. Cognitive ethology (and by extension, cognitive psychology, and cognitive science in general) focuses on identifying similar cognitive mechanisms across different animal *species rather than individual animals*.

Let us look at the nature of 'beliefs' in Kornblith.¹⁴⁷ What is this causal/explanation feature of beliefs in psychology that Kornblith is so interested in? Is it the

¹⁴⁷ My emphasis points to the fact that the conceptions of belief and justification (and consequently, knowledge) that Kornblith maintains in *Knowledge and its Place in Nature*, are radically incompatible with his earlier conceptions of these phenomena. For instance, on justification, he once argued that we cannot rely solely on the reliability of our belief-forming mechanisms. That we need to examine the character of the epistemic agent by examining "the etiology of his actions" (Kornblith, 1983, p. 38). This point was made to check the radical version of externalism that is expressed in the reliabilist position of epistemologists such as Alvin Goldman. See (Goldman, 1993a).

mechanisms that cause these beliefs or what these beliefs (cognitively) can cause, such as human behaviours? Why did he think that beliefs, as an important causal/explanatory category in psychology, provides cues for understanding how the category of knowledge turns out to be an important causal/explanatory category in cognitive ethology? I will address these questions by stating that Kornblith rejects the notion of beliefs in philosophy because, by being private and unstable, they are inadequate for his project.

Kornblith wants us to see “the psychology of animals” in terms of “creatures with beliefs”. He has two reasons for this. First, to argue that all animals have cognitive mechanisms that are responsible for forming “beliefs’. Secondly, Kornblith’s larger target is to establish some causal and explanatory links between evolutionary or environmental informational demands, animal beliefs, animals’ cognitive capacities and human/animal species; in a way to establish natural kinds. Thus, the unique role that beliefs play in Kornblith’s theory of knowledge lies in the fact that he seems to attribute representative capacity to beliefs by presenting them as human schemata about nature. He gives the impression that all beliefs describe or represent some features of the world, although some beliefs may accurately describe while others may be less accurate or inaccurate. In instances where beliefs accurately describe the world, we have cases of knowledge. From this view, epistemology is still normative because we still need to differentiate between situations when a belief constitutes knowledge and when it fails to do so.

How is this different from any other epistemology? The analysis of Kornblith’s position provided by Jose Luis Bermudez gives some important insights. According to Bermudez (Bermudez, 2006, p. 302), Kornblith is looking for a causal and explanatory category that can link human behaviour and cognitive capacities (at the species level) with nature. Consequently, Kornblith thinks that the notion of belief in psychology is more appropriate in the sense that it explains individuals’ behaviours (rather than individuals’ attitudes to propositions that characterise the notion of belief in epistemology). In addition, concentrating on the notion of belief in psychology, “the notion of knowledge comes into play when we move beyond individuals’ behaviours to consider the patterns that they display and the cognitive

capacities that make them possible” (Bermudez, 2006, p. 302). The point is that, while “a theory of knowledge” (as justified true belief in traditional epistemology) links the cognitive activities of individual knowers to a community of knowers, a theory of knowledge envisaged by Kornblith (with a psychological background) links natural facts about animal species with nature.

In addition, as noted by Bermudez, Kornblith is not thinking of justification in terms of what can be added to a belief to count as knowledge but rather in terms of capacities that give rise to true beliefs. While a standard version of reliabilism will endorse the notion of belief in epistemology (for instance, recognise inputs from reliable mechanisms for a belief to count as knowledge), Kornblith’s position recognises only the *attunement* of belief mechanisms by nature (Bermudez, 2006, p. 300). Consequently, from Bermudez’s point of view, Kornblith has abandoned the peculiar notions of belief in epistemology for what obtains in psychology and cognitive ethology.

However, my contention is that Kornblith wavers between psychological and philosophical notions of belief in his work and because these two notions are incompatible, it becomes problematic for Kornblith to explain *the process of belief formation* and what he calls *the attunement of belief* to the world. While a traditional epistemologist may agree that the external world can contribute directly to the emergence of some of our beliefs (I see a bird and believe it is a Kiwi and not a flamingo), he will however contend that many of our beliefs are dependent on our subjective dispositions (I believe his love for China is not genuine). However, most epistemologists seem to regard the subjective aspects of belief-formation as decisive. In contrast to the epistemological tradition, Kornblith seems to be emphasising the aspects of belief formation that are caused and regulated by nature. More importantly, Kornblith’s description of the justification of animals’ beliefs in terms of “attunement cases” of some category of beliefs seems to imply a nature-regulated notion of justification rather than in terms of human rationally conscious efforts. In Bermudez’s words, he is projecting a kind of un-reflective knowledge” (Bermudez, 2006, p. 299). This point will

become clearer as we now turn to discuss how Kornblith rejects traditional approaches to justification.

Kornblith's theory of justification shows how he rejects the traditional and modern approaches to the justification of beliefs in two significant ways: both individualistic and socialistic approaches. I will provide only a sketch of this view. Firstly, Kornblith argues that the common practice of self-consciously considering the epistemic credentials of one's beliefs is not a prerequisite of knowledge (Kornblith, 2002, p. 164). He argues that introspection is implicated in all such theories of justification. Introspection plays a central role in Cartesian methodic doubt as a medium of evaluation of beliefs (Kornblith, 2002, p. 107). Introspection also plays a central role in the internalist quest for self-evident truths typified by Roderick Chisolm's position (Kornblith, 2002, p. 109) and in coherentist positions typified by Laurence Bonjour (Kornblith, 2002, p. 110). Why is Kornblith against introspection? Is it because of his empiricist leanings? I think the reason is deeper than this.

Kornblith's argument is that all subscribers to the traditions that prioritize introspection think that introspection is indispensable because of its advantages. Firstly, they all think that introspection can be called upon for "corrective" measures:

... to reveal the defects of our current epistemic situation, to provide the will with the appropriate materials with which to remedy the situation, and to certify that those defects have been remedied (Kornblith, 2002, pp. 107-108).

Secondly, a "constructive" usefulness of introspection is derived from its corrective role; the ability of the human mind to identify the sources of errors and provide remedies. Introspection aids the epistemic self-improvement of epistemic agents given the assumption that,

... the responsible epistemic agent is truth-seeking and that in attempting to improve his epistemic situation he is attempting to improve his reliability; he wishes to be more effective in getting at the truth (Kornblith, 2002, p. 120).

However, Kornblith argues that the fact that all these epistemological traditions have not solved the problems of knowledge shows that introspectionism has failed as a methodological approach (2002, pp. 116-120). For him, introspection fails most significantly because “our processes of belief acquisition, and indeed mental processes in general, are largely unavailable to introspection” (Kornblith, 2002, p. 120). In chapter 3 of *Knowledge and Its Place in Nature*, Kornblith rejects two notions that traditional epistemology regards as prerequisites of justification and thus knowledge. The first is that there is need for self-conscious reflection which he called individual metacognition. This is “some sort of reflection on the epistemic status of one’s beliefs”. The second is the need for social metacognition “in the form of engagement in the social practice of giving and asking for reasons (Kornblith, 2002, p. 70). Here, I focus only on his notion of social metacognition.

One can argue that Kornblith defines reflection strictly or stipulatively in terms of inner processes of introspection. On the contrary, one might say that “reflections” involve both covert actions (in terms of psychological processes) and overt actions (in terms of physical manifestations of those inner psychological processes). For instance, when I reflect about a belief, my aim is to show why I should hold it or not. When reflecting on that, I think about what possibly could serve as evidence. My reflections may involve others in dialogue, argumentations, and the practice of asking and giving reasons for holding a belief. This inevitably points to some social practices which go beyond introspection. It may also involve putting together material evidence for accepting the belief as true rather than false; for instance, in cases where my beliefs are about empirical claims. Is Kornblith denying this argument? No, I don’t think so. Rather, I think he is challenging the relevance of the overt or social dimensions of introspection to knowledge, of “engaging in the social practices of giving and asking for reasons” as prerequisites for knowledge (Kornblith, 2002, p. 162).

Finally, Kornblith’s position has been challenged on the ground that it deprives epistemology of its normative force. For instance, Bermudez notes that Kornblith’s position resembles standard reliabilism in its focus on cognitive capacities that reliably generate true beliefs about a domain. What sets his position apart from

standard reliabilism is that we need not ask what we can add (through reflections on argument and evidence) to a true belief for it to count as knowledge. Consequently, he thinks his position has produced an account of knowledge that is non-reflective (Bermudez, 2006, p. 300). Kornblith contends that his approach does not deprive epistemology of its normative force but rather emphasizes it by “grounding knowledge in the world and seeing it as an evolutionary product of animals’ information needs (Kornblith, 2002, pp. 165-166). He contends that we cannot deny that reflective activities that produce successful animal/human behaviour (in terms retaining habits and developing traits for survival) exhibit high level of rationality or are based on normative principles and considerations.

However, it is arguable that Kornblith begs the question when we consider that human history is not only about successful human behaviour and actions intended for successful adaptation. Many activities that are best described as “trial and error” loom large in real human life. People commit mistakes by misinterpreting their environment but nonetheless learn from those errors. Some belief-forming processes are more reliable than some others. One of the motivations of traditional epistemology is to identify and avoid such errors so that knowledge can be consistently attained. This is what necessitates the quest for an objective, truth-conducive or truth-tracking theory of justification. However, the concept of justification in Kornblith’s thesis is defined in terms of conduciveness of animals’ behaviour to their survival rather than to truth. In Kornblith’s words; “faced with a choice between two processes, natural selection will favour the more conducive for survival, and less truth-conducive process” (Kornblith, 2002, p. 59).

However, Kornblith realises that his position can be interpreted to mean that “conduciveness to survival is the only thing that is ever selected for”, which he admitted to be too sweeping and finds no support from current biological practice (Kornblith, 2002, p. 60). He argues that what his position really affirms is that “any conception of sophisticated animal behaviour” will present animal cognitive equipment as “serving the goal of picking up and processing information” (Kornblith, 2002, p. 60). He may be right about this but the fact remains that the concept of justification in his thesis is decisively defined in terms of “survival” and

the concept of “truth” is totally omitted. It is at this point that turning to Dewey’s instrumentalist conception of knowledge, truth and justification can strengthen Kornblith’s position.

In the next section, I compare Kornblith and Dewey’s accounts of pre-reflective animal interaction with nature and argue that Kornblith’s position needs a full-blown ontological theory of animal/nature interaction to present a more convincing account of animal knowledge. Secondly, I discuss the advantage of Dewey’s concentration on human traits (which can be supplemented with a wider account of animal traits) to build a scientific theory of (animal) knowledge over Kornblith’s wavering between psychological and philosophical notions of beliefs.

6.3 Dewey on natural kinds

In this section, I articulate some arguments in Dewey’s work that show the idea of natural kind he favours. Such arguments include seeing natural kinds in terms of evolving biological and behavioural traits rather than in terms of rigid taxonomy such as fixed essences or properties. I also link these arguments to both his conception of nature as dynamic and ‘reality’ as characterised by a series of historical events and his subscription to evolutionary theory. From this point of view on evolution, how human actions, thoughts, and ability to retain certain traits or behaviour and the development of cognitive abilities were compared with Kornblith’s notion of the influence of nature on animal behaviour. More importantly, the theories of knowledge in both positions will be compared.

However, the section concludes that Dewey’s emphasis on knowledge as *a natural transaction* rather than as *a natural kind* (as emphasised in Kornblith’s position) makes a huge difference. It also concludes that Dewey’s conception of knowledge as natural transactions offers a better prospect for a scientific theory of knowledge. This is arguably an aim that informed Kornblith’s struggle to present knowledge as a natural kind. I start my discussion with Dewey’s critique of some conceptions of natural kinds.

6.3.1 Dewey's critique of natural kinds; between the notions of essentialism and evolving biological and behavioural traits

In *Logic: The Theory of Inquiry*, Dewey rejects the classification of natural kinds in terms of what he called "rigid taxonomy". This simply means a rejection of the idea that entities in nature "naturally" possess some fixed "essences" or some "necessary and sufficient properties" that can be used to classify them into natural kinds. Rather he favours explanation of natural kinds in terms of "genetic classification" or what Laporte calls "shared history" (Laporte, 2004, p. 64):

As long as kinds were supposed to be ontological species marked off in nature, rigid taxonomic classification was inevitable. The substitution for such schemes of flexible relational kingdoms, orders, families, species, varieties, etc., in zoology and biology, was equivalent to determination of the relation of kinds on the ground of relationship to regulated systematic inference... However, the discovery of progressive derivation, through differentiation under environing conditions, from a common ancestor, institutes an objective basis. In comparison with the theory of fixed species, it marks restoration of an objective status of classification but upon different basis. Externally, the difference is marked by the substitution of belief in "the origin of species" for the assumption of fixed natural kinds. The logical equivalent of this change is a working postulate viz., that the arrangement of singulars in the classes which promote and control extensive inference, is that of genetic derivation or descent, where derivation into kinds is conjoined with differentiations of environing conditions. On this basis, reptiles, for example, are found to be more nearly akin to birds than to toads and salamanders, with which they were originally classified (J. Dewey, 1991, p. 295).

Two points are important in Dewey's notion of natural kinds which not only show the continued relevance of his position in contemporary discussions but contain some unique claims which can be explored in the debate on knowledge as a natural kind. The first point is that, rather than seeing natural kinds as determined by rigidly fixed essences, Dewey's classification, and explanation of them depends ultimately on facts concerning evolution which includes "interaction" between species and "environing conditions". According to this position, entities in nature are to be treated as kinds in respect of the evolving biological and behavioural traits they share. A pointer to this fact, according to Dewey, is the notion of "transitivity" that is indispensable in an account of natural kinds. This is exemplified in kinds where "an extensive or inclusive kind has been determined with respect to include kinds in an order of progression". For example, "when

whales have been determined to be mammals and mammals to be vertebrates, there is warranted transitivity from whales to vertebrates” (J. Dewey, 1991, p. 330).

From this, it follows that other factors that have been suggested as criteria for the classification of natural kinds (such as “essences” or Kripke’s “internal structures” or “chromosome structures” (Kripke, 1980, pp. 120-121)) are also to be explained in reference to evolutionary history of natural selection.¹⁴⁸ In this regard, Dewey’s position on natural kinds can be compared with the view of modern day biologists who have explained how DNA and genes are modified in mutations.

The second point concerns Dewey’s view about why the cognitive study of natural kinds is important. For him, “scientific natural inquiry is notoriously concerned to establish related kinds”. However, for him, this concern is not final but rather is a means to an end. Two interrelated purposes are identifiable. Firstly, it is to have a systemic account or explanation of the world in a way that evolutionary progress is accounted for. Secondly, it is to provide a framework for controlling nature (J. Dewey, 1991, p. 331). Again, it is important to note how Dewey’s emphasis on the purposeful study of natural kinds is connected with his other ideas about nature (in general) which include the idea that nature is an instrument for experimentations (J. Dewey, 1925, pp. 102-137).

What follows from these two points is that Dewey takes the classifications of entities in the world into natural kinds as primarily an ontological matter. He emphasises on the point that kinds and their relationships in nature are discovered and described. He argues that “qualities which descriptively determine kinds are traits or characteristics” of existence (J. Dewey, 1991, p. 259). These traits are descriptions of reality. Facts about inner structures of kinds and evolutionary factors

¹⁴⁸ However, an objection can be raised against the classification of natural kinds in terms of “shared history” or “interactions” by pointing out that the classification is either too anthropocentric or applies only to living organisms and does not describe appropriately the relationship between elements in non-living entities such as oxygen and nitrogen in water and the relationship of elements that make up other entities such as gold and jade. The classifications of these non-living entities into natural kinds arguably are based on fixed properties or essences. Although, exploring this objection deeper is important for a comprehensible metaphysics of natural kinds, what I needed to establish at this point is the relevance of Dewey’s position among contemporary scholars with focus on the consideration of human knowledge as a natural kind.

(interactions and environing conditions) combine to form homeostatic structures for classifying species and entities into kinds. However, epistemological considerations become prominent when he argues that kinds are manipulated for human purposes. He contends that they are instruments. More importantly, he contends that the “real nature” of some natural objects such as crude ores, copper, pure metals and so on, do not lie in their immediate qualities but in what we get when we treat them as materials for getting something else (J. Dewey, 1925, p. 111). His point is that a proliferation of kinds is actuated in human experimental transactions with nature. Furthermore, his more contentious claim is that the relations between entities are as real as entities themselves.

What I regard as most important at this point is drawing attention to some of Dewey’s descriptions of natural kinds that arguably are identical with his descriptions of the nature of human knowledge. For instance, both are regarded as descriptions of reality, traits of existence and instruments for manipulating nature. In addition, facts about evolution loom large in the identification of both natural kinds and human knowledge and generate their homeostatic structures.

In the next section, I articulate and explore the similarities in Dewey’s descriptions of the nature of natural kinds and human knowledge that are prominent in his work and consider to what extent these descriptions are parallels to some descriptions of knowledge as natural kinds in Kornblith’s work.

6.3.2 Some parallel arguments in Dewey and Kornblith’s conception of knowledge as a natural phenomenon

In chapter three, we discussed how Dewey described the employment of the word “knowledge” by mainstream epistemologists as too wide and vague (J. Dewey & Bentley, 1949, pp. 48, 296). His contention is that there are several traditional accounts of “knowledge” where the word has been used ambiguously; as an abstract concept, as synonymous with experience or contemplation or meditation. He also cites instances where distinctions are made between propositional or factual knowledge (knowledge-that), practical or technical knowledge

(knowledge-how), and empirical knowledge (knowledge-what) (J. Dewey & Bentley, 1949, p. 296). He identifies these ambiguities as the cause of most of the recurring “problems of knowledge”. Dewey rejects all these depictions on the ground that they all miss the natural, empirical and practical nature of knowledge. However, there are some features of knowledge that he takes to be definite. Among the most emphasized are: (i) knowledge as a mode of interaction between humans and nature (ii) knowledge as ultimately a human activity and (iii) indicating something the organism produces rather than possesses (J. Dewey & Bentley, 1949, p. 296) and (iv) knowledge as successful human behaviour. It is notable that these descriptions of knowledge also dominate Kornblith’s discussion of knowledge as a natural kind.

The central claim in Dewey’s *Experience and Nature* is that knowledge consists in interactions between humans and nature. Dewey describes the interaction as “natural transactions”. This view arguably is implicated in Kornblith’s *Knowledge and Its Place in Nature* where he describes knowledge in terms of animal responses to environmental constraints. Both philosophers explain these transactions in terms of human/animal purpose-oriented responses to challenges in nature. It is in this sense that knowledge is taken to be an action-doing word and not a concept or a proposition. In addition, both philosophers explain these human activities in terms of behaviours. In *Knowing and the Known*, Dewey argues that “knowings are behaviours” and that “neither inquiry into knowing nor inquiry into behaviours can expect satisfactory results unless the other goes with it hand in hand (J. Dewey & Bentley, 1949, p. 74). The point is that knowledge refers to existential phenomena. In his explanation of this point, Dewey analysed the concept of “knowledge” from two words - “knowing” and the “known”. According to him, “knowings” are “organic phases of transactionally observed behaviours” (J. Dewey & Bentley, 1949, p. 296). By this, he meant that “knowing” is essentially a practical or physical activity involving observable manipulations of nature. It is organic in the sense that it involves nature-human symbiotic relationship. In this regard, “knowings” (or cases of knowledge) are points of convergence or cumulative effects of inquiry; descriptions of concrete state of affairs in nature.

On the other hand, the “knowns” are “environmental phases of transactionally observed behaviours” (J. Dewey & Bentley, 1949, p. 297). Dewey uses these ‘definitions’ of “knowns” and “knowings” to stress the continuity between the “knower” and the “known” - as phases of a common process.¹⁴⁹ Both, described in Deweyan sense, are inseparable parts of nature.

From the foregoing, it is evident that both Dewey and Kornblith are avowed radical empiricist-naturalist philosophers who reject a priori knowledge. Both philosophers defend knowledge as a natural phenomenon by appealing to the causal link between nature (in terms of environmental challenges), human thought, and actions. Specifically, they appeal to facts about evolutionary theory to explain knowledge. More importantly, both philosophers define knowledge significantly in terms of practical activities and link it with successful human behaviour. Let us recall what Dewey said in his description of the general link between human knowledge and a successful manipulation or re-ordering of nature.

When the things which exist around us, which we touch, see, hear, and taste are regarded as interrogations for which an answer must be sought (and must be sought by means of deliberate introduction of changes till they are reshaped into something different), nature as it already exists ceases to be something which must be accepted, and submitted to, endured or enjoyed, just as it is. It is now something to be modified, to be intentionally controlled. It is material to act upon so as to transform it into new objects which better answer our needs. Nature as it exists at any particular time is a challenge, rather a completion; it provides possible starting points and opportunities rather than final ends (J. Dewey, 1930, pp. 97-98).

In this passage, Dewey presents nature as both the cause and object of our philosophical reflections, which commence when Nature poses a challenge. This reflection becomes knowledge when it brings about inquiries and actions that result in solutions to the problem. Consequently, successful human activity is determined (in Deweyan sense) by its manipulative or restructuring impacts in nature and (in Kornblith’s sense) by the navigational correctness of the animal.

¹⁴⁹ Dewey prefers using the concept “transaction” rather than “interaction” to express the symbiotic relation between human species and nature on the ground that “interaction” implies two distinct and detachable entities relating with one another. “Transaction”, on the other hand, is meant to show that human species is part of nature (J. Dewey & Bentley, 1949, p. 304).

Both philosophers appeal to the successful evolutionary progress of the human species as a justification for this success. Their point is that only a correct description of nature can guarantee human survival. For Dewey and Kornblith, knowledge designates characters of existential reference. This simply means that knowledge reflects natural continuity or natural events. The thrust of their argument is that, given that knowledge is inherently connected with actions or activities going on in nature (i.e. modifications of existence), it is a description of what obtains in nature. This position offers a good argument for stating that knowledge is a natural phenomenon and that studying human knowledge (epistemology) is a legitimate scientific enterprise just like the study of atoms and other elements whose re-arrangements or re-configurations bring about changes in the structure of reality.

Furthermore, one can appeal to some of the implications of Dewey's reconceptualization of the concept of "experience" and his rejection of "the spectator theory of knowledge" to underscore the point that his position favours the claim that knowledge is part of the world. In chapter two, we discussed how Dewey rejected the traditional conception of "experience" as indicating subjective human awareness of nature and replaced this conception with the idea that human experience forms an integral part of nature. Again, we recall his radical reconceptualization of human "experience" as *"double-barrelled"* in that "it recognizes in its primary integrity no division between act and material, subject and object, but contains them both in an unanalysed totality" (J. Dewey, 1925, pp. 10-11). Again, he writes:

The reader will recall that in our general procedure of inquiry no radical separation is made between that which is observed and the observer in the way is common in the epistemologies and in standard psychologies and psychological constructions. Instead, observer and observed are held in close organization....Our position is simply that since man as an organism has evolved among other organisms in an evolution called "natural," we are willing under hypothesis to treat all of his behaviors, including his most advanced knowings, as activities not of himself alone, not even as primarily his, but as process of the full situation of organism-environment; and to take this full situation as one which is before us within the knowings, as well as being the situation in which the knowings themselves arise (J. Dewey & Bentley, 1949, pp. 103-104).

The major contention from Dewey and Bentley here, is that, although knowledge is indubitably geared towards human interest, it need not be so - if the traditional conceptualization that contrasts human beings with nature is discarded. With Dewey's symbiotic conception, human beings, their interests, knowings and activities, are "organic phases" of some processes in nature.

Another important aspect of Dewey's conception of experience that supports Kornblith's position is the distinction between primary experience and secondary human experience. Dewey describes primary human experience or encounter with nature as "raw" and non-reflective because things are just had, used or eaten. However, reflective, and continued inquiry characterises secondary experience. The point is that what is "primary" for Dewey has much to do with whether or not a reflective (and/or inquiring) process is underway and forefront of all overall consideration. The absence of purposive reflective inquiry in Dewey's primary experience can be compared with Kornblith's contention that reflection plays no significant role in the formation of animal knowledge. Both philosophers started their accounts of animal/human knowledge on the basis that nature serves as the cause of certain animal/human conditions and that they (humans/animals) respond in certain ways such as retained traits or behaviour. From these positions, the usual distinction between human and animal knowledge based on the supposed higher reflective capacities of the former, seems to be momentarily dismissible. Here, the link between Dewey's and Kornblith's conceptions of knowledge as a natural phenomenon is undeniable.

With these similarities in Dewey and Kornblith's positions on knowledge, the question to be considered is, are both philosophers in agreement that knowledge is a natural kind? The answer is no. There are several major differences between Dewey's position and Kornblith's position that can be used to underscore this point and can provide a basis for a critique of Kornblith's theory of knowledge as a natural kind. I now discuss some of these differences and their implications.

6.3.3 Dewey and the contention that knowledge is a natural kind

One of the major differences is that while Dewey claims that knowledge is a natural phenomenon, Kornblith claims that it is a natural kind. What is the difference? For Dewey, experience and knowledge depict natural occurrences or what happens in nature. While the former refers to the totality of human activities in nature, knowledge describes some specific or purposeful human activities that are successful, such as manipulating or re-ordering nature in some specific ways (J. Dewey, 1925, p. 134). In this regard, it is arguable that *knowledge is an evaluative term describing human activities* and not what we can call *carving nature at its joints*.

In addition, in Dewey's explanation of how knowledge is attained or how an indeterminate or problematic situation is brought to settlement, there are many possible ways of achieving this goal. Consequently, human beings have to choose between several alternatives (which Dewey referred to as hypotheses) in the process of inquiry. For Dewey, knowledge is attained through trial and error. This is a process that is dynamic because nature and the challenges it brings are dynamic. When attained, knowledge is an instrument to be used *objectively* in solving problems emanating from human transaction within nature. Consequently, reflection plays a significant role in inquiry or discovery of knowledge and in the instrumental applications of knowledge. Dewey describes the purpose of knowledge as "effecting modifications of existence on behalf of conclusions that are reflectively preferred" (J. Dewey, 1925, p. 134). The fact that in Dewey's theory of experience, inquiry and the discovery of knowledge is in the secondary and reflective experience corroborates this idea that knowledge requires reflection. Miller et al give a succinct description of Dewey's notion of inquiry and knowledge (its product) and how they are inseparable from reflection:

Intelligent inquiry mediates human responses to the challenges of the living. In so doing, it frees human beings from reliance on instinct and fixed routines; it enhances the power to achieve desired results (Miller, Fins, & Bacchetta, 1996, p. 33).

Thus, I argue that higher level of reflection is needed for human purposes such as desire for quality life, moral living, and dominating nature. This requirement necessarily creates a huge difference between human and animal knowledge. This is a distinction that Kornblith's position arguably obliterates.

Furthermore, we have different forms of problematic situations across different social contexts and consequently there are different exemplifications or "warrants" of truth and knowledge. However, there are characteristics shared by them all. Consequently, paradigm cases of knowledge are found in actual human situations, human problems and human transactions in the world. In this regard, it is noteworthy that Dewey will agree with Kornblith on the point that evolutionary processes have impacts on numerous physiological and psychological parts of human beings which includes their cognitive apparatuses such as the brain and perceptual organs. He will also agree with Kornblith that raw animal needs such as means of sustenance and environmental adaptations influence their thoughts and actions.

However, Dewey's conception of knowledge is equally fundamentally built around social concepts (such as community of inquirers) and organised social activities (such as social interactions, social inquiries and social goals). It is arguable that these factors influence Dewey's notion of knowledge and tilt it more towards the category of what we can call a "social kind" rather than a natural kind. This focus on the social nature of knowledge (in terms of social organization and actuated by social needs) is absent in Kornblith's position which is deliberately focused more on those animal behaviours, bodily actions and natural needs that humans share with the lower animals rather than those aspects he describes as "sophisticated aspects of human knowledge (Kornblith, 2002, p. 29).¹⁵⁰ Consequently, Dewey's thesis on the instrumentality of knowledge will be incompatible with any position that places the creation and application of human

¹⁵⁰ We can reiterate our earlier discussion of Kornblith's attempt to establish some level ground between human knowledge and animal knowledge. He discards the objection that human knowledge is higher or more social and consequently more philosophically interesting than animal knowledge (Kornblith, 2002, p. 29).

knowledge strictly in the control of nature. In this sense, Dewey's theory of knowledge makes a distinction between what originates from natural selection and what originates from human natural transactions in the world.

It follows from this that knowledge and nature are two different things just as we can separate "means" from "ends" and "instruments" from what they are used for. If knowledge is a natural kind or a part of fabric of nature, the kind of relationship that obtains between water and the combination of hydrogen and oxygen (that makes "water" a natural kind) is absent in Dewey's description of knowledge. In my understanding of the two positions, Kornblith seems to have interpreted evolutionary theory in a way that human choice of actions or the development of human cognitive capacities and properties are totally dependent on evolution. This emphasis is absent in Dewey's position.

From the foregoing, it is evident that Dewey's contention that Knowledge depicts natural human transactions in nature raises some challenges to Kornblith's contention that knowledge is a natural kind. However, it is arguable that both contentions are meant to serve one purpose - to provide a naturalistic and scientific theory of human knowledge. Which position provides a stronger argument for this claim? I now discuss the claim that Dewey's position offers better prospects.

6.3.4 Dewey's conception of knowledge as natural transaction and the prospects for a normative scientific epistemology

In this section, I explore the argument that the root of Kornblith's contention that knowledge is a natural kind and Dewey's contention that knowledge is human natural transaction lies in the quest to establish a scientific epistemology. However, my main target is to establish that Dewey's conception of knowledge as *human natural transaction* arguably fulfils this purpose more than Kornblith's position. My contention is that Dewey's position offers a more comprehensible scientific epistemology because of the more detailed and comprehensible account of

naturalism it has as a background. I start by recalling the naturalist background to the positions of both philosophers.

In *Knowledge and Its Place in Nature*, one of Kornblith's major aims is to identify some paradigmatic similarities between the animal behaviours studied by cognitive ethologists and human knowledge studied by naturalizing epistemologists for the purpose of inferring that the latter is equally a legitimate scientific category (Kornblith, 2002, p. 29). Kornblith's tactical approach is to demonstrate how epistemology can be linked with science through the adoption of a version of naturalism he endorses:

The investigation of the phenomenon of knowledge, on the naturalist's view, is an empirical investigation, the legitimacy of epistemic terminology depends on its properly latching on to genuine, theoretically unified kinds. That is all that naturalistic scruples require.... Their terminology earns its keep in just the way that chemical or biological or physical terminology earns its keep: it must be part of a successful empirical theory. The fact that terms such as 'knowledge' are not parts of physics or chemistry does not show that they are not naturalistically acceptable. Rather, the question for naturalists is whether knowledge turns out to be a theoretically unified phenomenon, and this gives every appearance of being a legitimate and tractable empirical question (Kornblith, 2002, p. 24).

The key issue in this passage is the claim that a naturalistic investigation of knowledge involves theoretical unification. However, it is arguable that the phrase is ambiguous. Does it mean that an approach to the phenomenon of knowledge is naturalistic if it is theoretically linked with some other theories in science which is regarded as a successful empirical theory? Or, does it mean that presenting knowledge in a naturalistic way requires that the phenomenon must help in explaining other phenomena that would have remained otherwise incomprehensible; just as gravity explains motions of the planets in theoretical physics or chemicals are combined in chemistry to produce a chemical reaction or change? I think Kornblith wavers between the two interpretations. One obvious target is making knowledge a legitimate subject-matter of scientific discourse. How does this work out? Two apparently easy ways are not available to Kornblith. First, given that scientists do not focus directly on the term knowledge, the possibility of seeing all inquiries about knowledge as "scientific" is foreclosed. A

special case needed to be made such as “naturalizing” knowledge. Second, Kornblith cannot appeal to methodological naturalism by claiming that the methods for studying atom, amoeba and force fields in science are equally applicable to animal knowledge because he wants a theory that is free from the allegation of scientism and more importantly that is philosophically interesting.

Kornblith chooses to demonstrate that knowledge is homeostatic like any other natural kind; homeostatic unity that plays a “causal and explanatory” role among kinds (2002, pp. 28-29). Concerning animal knowledge, the causal role concerns the formation of the kind’s characteristic properties and behaviour by natural propensity. The explanatory role is specifically explained in terms of a bi-conditional relation between the process of natural selection and its outcome (survival or adaptability of animals). He argues that without understanding knowledge in this sense, it will become impossible to explain how numerous and seemingly unrelated animal behaviours are causally linked up with one another or can be given meaningful explanations and predictions. This is Kornblith’s naturalism. He thinks this makes inevitable the notion of knowledge as a natural kind.

It is arguable that this version of naturalism links the study of animal knowledge with the biological structures of animals’ cognitive mechanisms and animal behaviour which are legitimate scientific phenomena. However, it is arguable that it does so at the expense of having a distinctively philosophical enterprise. Kornblith sets out (Kornblith, 2002, p. 29) to refute scholars such as Bealer and Bonjour who have argued that naturalism must be rejected in a distinctively philosophical enterprise (Kornblith, 2002, pp. 25-27) but ended up with the claim that epistemology is “nothing more than a branch of cognitive ethology” (Kornblith, 2002, p. 172).

However, this version of naturalism faces several problems. First, it narrows down “animal behaviour” to what can be described as “less-reflective behaviour” or instinct-based behaviour. These are behaviours that philosophers such as Ernest Sosa will describe as incapable of engendering the kind of knowledge that requires

“perspectival endorsement of the reliability of one’s sources” (Sosa, 2001, p. 194). However, a more pressing problem is that Kornblith will find it difficult (using the approach of the cognitive ethologists) to transcend from animal knowledge to human knowledge. There will be a vacuum created by the absence of a comprehensible theory of human reflective activities. I think Kornblith’s major problem is that his naturalism needs a corresponding naturalistic metaphysics that will serve as a background. His presentation of knowledge playing the “homeostatic” role in animal life seems to imply that knowledge is the only means of engaging the world.

Dewey has a naturalistic metaphysics that serves as a “foundation” and complement for both his naturalistic epistemology and any form of scientific inquiry. An account of Dewey’s naturalist exploration has been the focus of chapters 1– 3 of this work. However, we can reiterate some basic aspects of the discussion. The uniqueness in Dewey’s naturalism begins with how he developed an empirical metaphysics that entails a naturalist epistemology. For him, an empirical metaphysics is a precondition for a naturalist epistemology. Consequently, he starts with rendering an empirical account of human experience which he takes to be primarily a metaphysical (ontological) issue. He reconceptualised human nature and human experience to show that both are integral parts of nature. He also contends that for both naturalist metaphysicians and natural scientists, “experience” is the only pathway to unravel and control nature. For him, “experience” signifies the entire history of human endeavour to understand and cope with nature. With human experience in nature becoming a legitimate scientific subject-matter, all cognitive endeavours (philosophy, science, logic and so on) are interpreted as instruments purposely designed for “human transactions with nature”. Every successful application of these “instruments” in human transactions with nature is called “knowledge”.

Dewey argues for a major difference between humans and animals’ knowledge by citing Rignano’s view that lower organisms strive to get back to their previous environment or to those identical with the previous one they are used to (when their state is disturbed or after searching for food) which he describes as a

“conservative tendency”. According to him, the higher organisms on the other hand, strive to institute “an integrated relation” by modifying their environment (J. Dewey, 1991, pp. 34-35). For Dewey, while there is a “conservative tendency” in higher organisms, the differences in the rates in which changes occur in respect of their needs make a huge difference in their behaviour. For him, “unless this fact is recognized, development becomes abnormal feature”, and “with change in need comes a change in exploratory and searching activities; and that change is followed by a change in fulfilment or satisfaction” (J. Dewey, 1991, p. 35).

Secondly, Dewey argues that biological structures or factors (the sensory organs: eyes, ears, and the brains) “prepare the way for deliberate inquiry” and consequently both constitute what he called “continuity” between “the lower (less complex) and higher (more complex) activities and forms”. More importantly, he argues that this “continuity” is not self-explanatory (J. Dewey, 1991, p. 30). Consequently, an adequate naturalist approach to knowledge will not treat the formation and development of the biological structures, their operations and inquiry separately. These two points arguably raise questions concerning the adequacy of Kornblith’s version of naturalism in two ways. First, the problems render Kornblith’s naturalist epistemology impoverished. Second, his version of naturalism is a form of scientism because it focuses on biological structures alone. These problems are absent in Dewey’s theory of knowledge as natural transaction.

Moreover, Dewey’s instrumentalist and experimentalist conception of knowledge seems to suggest that the human knowledge he deals with (reflective and practical knowledge) is constructed or invented and not discovered. For instance, as rightly noted by Larry Hickman, Dewey sometimes describes “knowing as artifact of inquiry”. The aim is to emphasize its function in terms of manipulating or restructuring nature (1990, pp. 70-71). Consequently, we can describe how human beings come to understand how the brain, liver or blood function as discoveries and contrast this “knowledge” with technological knowledge about how to build skyscrapers, dams, and automobiles as discovery. From this view, “practical knowledge” is invented and performs the same instrumental role as buttons, objects, steel, and so on. This points to the fact that Dewey’s position poses a

challenge to Kornblith who argues that knowledge is a natural kind; given that natural kinds are discovered rather than invented or constructed. In addition, Dewey sees knowledge as “warranted assertibility” that is attained at the end of inquiry. From this view, it follows that what is assertible or warrantable is contextual - limited to some specific time and place. While this dynamic notion of knowledge is consistent with the evolutionary theory that is at the base of Dewey’s naturalism, it is at odds with the notion of natural kind.¹⁵¹ It also follows that knowledge remains unknown until inquiry comes to a (contextual) terminal point. Knowledge depends on the community of inquirers who adjudges or approves.

From the foregoing, one can argue that what offers “theoretical unity” in Dewey’s theory of knowledge and conception of the relation between philosophy and science is not knowledge but the symbiotic relation between nature and human beings, the problematic situations that emanate from human transactions with nature and engender reflective and experimental philosophical and scientific inquiry. From this view, knowledge in both philosophy and science plays an instrumental role. Inquiries in both fields are collaborative and consequentially social. This adds up to the recognition of knowledge as inherently a social phenomenon. The focus on higher-order human interests is significant in the naturalness of human knowledge. This runs contrary to Kornblith’s argument that, were human interests to impose upon knowledge, it would fall short of the category of natural kinds because human interests are parochial (2002, p. 65). However, for Dewey, knowledge in any cognitive studies is inevitably instrumental and social.

For Dewey, epistemological or philosophical knowledge complements scientific knowledge. While natural sciences such as biology, chemistry and medicine are regarded as cognitive endeavours with focus on some specific aspects of human transactions, epistemology focuses on more general aspects. This general focus

¹⁵¹ It is arguable that this view begs the question given the fact that both Dewey and Kornblith reject natural kinds in terms of fixed properties or properties in terms of necessary and sufficient conditions. However, the notion of dynamic change embedded in Dewey’s evolutionary knowledge implies a kind of regular and persistent change that runs contrary to changes that have been observed about natural kinds.

marks the distinctiveness of epistemology (philosophy) from science. Like Kornblith, Dewey draws from evolutionary theory, and envisaged a scientific philosophy. Unlike Kornblith, he develops a naturalism that does not reduce philosophy to science. However, Dewey's account of knowledge is more naturalistic and scientific because it presents the entire history of human kind (biological, physiological, psychological, social, and environmental) as the subject-matter of science.

6.4 Chapter summary

This chapter considered the continuing relevance of Dewey in contemporary philosophy by engaging him in the debate about the consideration of knowledge as a natural kind. I identified the motive for considering knowledge as a natural kind as the quest to establish human knowledge as a substantive subject-matter of science from which the naturalistic and scientific nature of epistemology can be based. I identified a similar quest in Dewey's naturalist epistemology. This similarity of focus prompted the exploration of other similarities, articulation of possible differences and most importantly, examination of which position is more plausible.

I started the chapter by articulating various standard views about features of natural kinds with paradigms in biology, botany, physics, and chemistry. I also mentioned some psychologists and sociologists who have contended that there are psychological and sociological kinds. I identified the idea that nature can be carved at its joints and that natural kinds made up these joints, as the most significant among the defining features of natural kinds. Consequently, natural kinds are regarded as entities grouped together by nature in contrast with entities that are grouped together for theoretical purposes, or created by human beings.

I then considered the debate among epistemologists on whether knowledge is a natural kind or not as one attempt to determine the possibility of a scientific epistemology. I explored Kornblith's position as a paradigm philosophical case for the possibility of presenting knowledge as a natural kind on two grounds. Firstly,

his attempt to make “human knowledge” an “extension” or “enlargement” of the animal knowledge that cognitive ethologists are studying, is commendable. Secondly, his thesis focused on epistemological concepts such as truth, justification, and beliefs. These considerations make Kornblith’s position more interesting than other positions which approach natural kinds through theories of reference (Putnam, 1975) (Kripke, 1980).

I considered the success of this position and found two of his central arguments defensible. He argued that understanding animal beliefs must be in terms of how the environment impacts on their belief-forming psychological mechanisms and results in animal behaviour. He also argued that justification of a belief lies in “successful human behaviour” measurable in terms of animal/human survival, and that it is this success that all forms of knowledge have in common. Both claims find corroboration in cognitive ethology and evolutionary biology, respectively.

However, I argued that how Kornblith inferred that knowledge is a natural kind from these arguments, is controversial. I identified a problem in his position - his analogy between animal and human knowledge. In his endeavour to present human and non-human animal knowledge as belonging to a natural kind, he became committed to two positions that are challengeable. Firstly, he abandoned the notions of belief in philosophy that are characterised with subjectivity and insecurity and adopted the notion of belief in psychology that appears to be more secure (being products of some reliable psychological mechanisms), having causal and explanatory links to human behaviour and at the level of species rather than individual. Secondly, he denied the need and role of reflection and the social practice of giving and asking for reasons, as prerequisites for the process of justifying beliefs to constitute knowledge. I drew five conclusions from these claims.

Firstly, Kornblith’s reliance on the notion of belief in psychology and his denial of the role of reflections and social inputs in the justification of beliefs led him to a theory of justification that is determined by nature-controlled mechanisms rather than being products of human rationality. Secondly, by concentrating on the

biological and ecological constraints at the expense of the reflective animal activities, his position is confronted with the problem of how to transcend from animal knowledge that ecologists are studying to the phenomenon of knowledge in epistemology. Besides, I argued that he succeeded in providing a naturalism that reduces epistemology (philosophy) to science. Thirdly, by concentrating on knowledge as the “homeostatic point” of the animal/human behaviour, I argued that he presented knowledge as the only means of engaging the world. I argued that this is false because animal/ human histories are full of numerous unsuccessful behaviours, many false beliefs that are sometimes useful and actions that are based on blind guess or chance that Kornblith’s position seems to obliterate. Fourthly, to appreciate Kornblith’s position, his epistemology must be considered as a rival to mainstream epistemology, although he wavered between two distinct and incompatible epistemologies. Finally, I argued that he only succeeded in presenting knowledge as a natural phenomenon rather than a natural kind. These problems prompted the idea of engaging Dewey in the consideration of knowledge as a natural kind.

In engaging Dewey in this debate, two approaches were explored. In the first approach, I considered the possibility of interpreting some themes in Dewey’s naturalist metaphysics and epistemology as offering arguments for the claim that knowledge is a natural kind. I explored his presentation of human experience as part of nature (from which he derived his claim that knowledge is a natural phenomenon) and his position on “traits of existence”. I considered how Dewey and Kornblith’s subscription to evolutionary theory brings about some remarkable similarities in their theories of knowledge. Both scholars emphasised how nature constrains animals/humans.

However, despite these similarities, I have argued that Dewey made a distinction, to a degree, between “knowing” and the “known” even though he insisted that the “knower” forms an integral part of the “known”. From Dewey’s analogy of the relation between “knowledge” and nature as means-ends or his conception of knowledge as an “instrument for multiple control”, I argued that Dewey’s theory of knowledge offers a critique of Kornblith’s claim that knowledge is a natural kind

rather than supporting it. Besides, I have argued that Kornblith's pursuit of the argument that knowledge is imposed by nature and devoid of human interests and inputs from social interactions among people, not only marks the incompatibility of his position with Dewey's position but equally renders his naturalist account of humans suspect.

In the second approach, I considered the argument that Dewey's analysis of knowledge as "natural human transactions" is more appropriate in his work than the consideration of knowledge as a natural kind. I also explored the argument that Dewey's conception of "knowledge as a natural transaction" offers brighter prospects for a scientific (and non-reductive) epistemology. The reason I gave for this is that Dewey's theory of knowledge is deeply rooted in a comprehensive and empirical metaphysics. It is arguable that Dewey's position is not only clearer but offers an account of epistemology that is more robust and more science-inclined.

Chapter Seven: Conclusion

Philosophers have made several attempts to establish an epistemology that can be described as scientific. A challenge in this quest is that philosophers are keenly interested in preserving the normative focus entrenched in traditional epistemology. They have argued that keeping this normative concern fosters the uniqueness of a philosophical approach to knowledge (Goldman, 1993b; Kim, 1985, 1994; Stroud, 1985).

The most common approach focuses on how resources in the sciences can be used in solving epistemological problems. Another approach can be seen in the quest to adopt the methodologies of the sciences. These approaches include the quest for the unity of science movement within logical positivism and also philosophers' subscription to methodological naturalism. Another approach can be seen in Quine's naturalized epistemology in which epistemology is identified as part of psychology (1994a). However, in this thesis, I explore and defend Dewey's approach as more successful than others. I identify three strategies in his approach: (i) adopting relevant scientific methods, (ii) modelling a methodology (after scientific methods) to address phenomena that cannot be investigated through standard scientific methods and (iii) presenting all inquiries as motivated by uniform or similar quests and serving uniform or similar purposes.

I began the thesis by identifying the quest for a scientific epistemology as the main theme in naturalism. I argued that differences in their approaches split naturalists into different camps. For instance, all naturalists agree that adopting scientific methods is a means of making philosophy scientific. However, while radical methodological naturalists favour the use of only scientific methods in philosophical inquiries, moderate naturalists defend the relevance of non-scientific a priori methodologies such as the use of analysis, argumentation, and intuitive reasoning. Moderate naturalists argue that scientific methods are incapable of shedding light on phenomena such as norms that feature prominently in epistemological inquiries. I criticised the radical naturalists for taking a reductive approach to apparently non-scientific phenomena such as emotion and religious

claims and beliefs. On the other hand, moderate naturalists were criticised because their claim to naturalism becomes ambiguous when compared with those of non-naturalists who are also disposed to the idea of adopting at least some scientific methods in philosophical inquiries. The same problem was noted in metaphysical or ontological naturalism which is the attempt to establish a scientific philosophy by adopting the ontology of science.

Focusing on the version of naturalism that dominates Dewey's later work, I set up Dewey's version of naturalism as a critique of other versions. I established his version of naturalism as an account of how human experience serves as a guide to understanding the nature of reality and the knowledge of how it can be transformed. I then considered the prospects for a normative scientific epistemology through this view.

How does a naturalist understanding of human experience engender a scientific and normative epistemology? I argued that the first step towards establishing a scientific epistemology is to understand how Dewey's theory of experience engenders a naturalist, empirical, and scientific metaphysics. Unlike traditional epistemologists who understood human experience in terms of human subjective encounters with or awareness of reality, Dewey analyses experience as the total history of nature which includes human transaction within nature. Rather than seeing human experience as human subjective awareness of the world, Dewey sees it as an aspect of nature or events in nature's history. This is because he sees human experiences as comprising both subjective and implicit actions (such as the awareness of the radiation of the sensory nerves) and overt actions (such as the constructions of dams and skyscrapers) For him, both are continuous with other natural occurrences such as plants responding to sunlight, rain-induced erosion or volcanic eruptions caused by plate movements. Dewey argues that human experience derives its features from being part of nature. Such features include a mixture of dynamically precarious and settled events. Understanding human experience as transaction within dynamic nature is Dewey's naturalist metaphysics. I argued that this metaphysics is scientific in terms of being empirical and experimental. It has all of nature as its subject-matter - just like science. I

argued that the strength of this metaphysics lies in its mutual complementary relation with science.

In setting up Dewey's epistemology, which I called epistemological naturalism, I explored how his conceptions of the subject-matter and methods of epistemology engender stronger prospects for a normative scientific epistemology than other attempts. On the subject-matter, I discussed how Dewey's naturalist conceptions of reality and human experience (metaphysics) provide a road-map for his naturalist epistemology. I explored how his arguments that the world is a mixture of interchanging stable and precarious events, and his description of human experience as transaction within nature (with the aim of manipulating or regulating some stability), set the stage for defining all forms of inquiry as problem-driven and knowledge as ultimately practical and instrumental. I argued that this conception of knowledge is ideal for the traditional goal of epistemology identified as *attainment of truth and avoidance of error*. For instance, seeing knowledge as essential for human survival emphasises the difference between knowledge and false beliefs or lucky guesses.

I also explored how Dewey's position challenges traditional epistemology by replacing the traditional theoretical or conceptual approach to knowledge with a practical and experimental approach. I discussed how this view necessitates practical and empirical methodologies. I also discussed how this approach to knowledge makes paradigms of knowledge in technological science more relevant to epistemology rather than those of the natural sciences.

With respect to his conception of methodologies for epistemology, I discussed Dewey's arguments that because epistemological inquiries are about manipulating or transforming nature, the appropriate methods are ultimately empirical and experimental. However, this claim does not rule out the heuristic usefulness of non-empirical methods such as analysis or argumentation. I noted Dewey's disagreement with traditional epistemology for regarding some aspects in human experience (such as emotion) as opposing reason and consequently outside the scope of epistemology. I also noted his disagreement with the

classification of some phenomena such as magic and religious experience as unscientific because the empirical methods of science are incapable of explaining them. I discussed Dewey's introduction and analysis of denotative empirical methodology for the understanding of the origin, roles, and importance of these phenomena in the experience of human beings. With this method, the origin of these phenomena in human transaction within nature and the functions they denote in human attempts to cope with nature, are made accessible to empirical investigations.

On both suggestions, I argued that Dewey's approach is distinctly different from the approaches taken by the radical or moderate methodological naturalists. My more important claim is that it is stronger, being non-reductive and because it engenders how some important aspects of human experience (esthetic experience: emotion, religious experience, and phenomena such as magic) can be empirically studied and thus freed from being regarded as sophistries or as unscientific.

I concluded by arguing that seeing knowledge as an instrument purposely established to solve some practical problems in human transaction within nature engenders a normative theory in which the justification of a belief or the confirmation of a hypothesis is based on how those problems are solved. I also argued that Dewey's position makes epistemology an empirical and experimental discipline. Hypotheses are formulated by drawing of the possible solutions for solving a recalcitrant human situation. They are tested for the purpose of identifying and selecting the hypothesis that offers the best solution. Predictions are engendered when facts about the causes of a situation are empirically laid out and projections about solutions are made.

After establishing Dewey's naturalist metaphysics and epistemology and how the former provides a road-map for the latter, I turned to explore the continuity of Dewey's original ideas in two ways. First, how they are preserved in Richard Rorty's neo-pragmatism. Neo-pragmatism is usually regarded as the successor

tradition of pragmatists such as Dewey. Second, I explored the extent to which these ideas are relevant to debates about knowledge in contemporary philosophy.

Addressing the connection between Dewey's philosophy and Rorty's neo-pragmatism, I explored how both Dewey's and Rorty's rejection of foundationalism, representationalism, and the traditional conception of knowledge as conceptual, qualify Rorty as a Deweyan. However, I argued that Dewey provided alternative theories to every position he rejected and redefined every problem he contended was wrongfully formulated, putting them in the proper framework before providing solutions to them. I argued that this is an acknowledgement of the genuineness of many traditional problems of philosophy. For instance, Dewey rejects the dualist way that Descartes formulated the mind-body problem without denying the reality of human mind. He also rejects how Pyrrho formulated the problem of universal scepticism while admitting the seriousness of sceptical challenges. I also argued that Rorty's popular position, that Philosophy must transcend itself to become cultural criticism has no basis in Dewey's philosophy. Given these fundamental differences, I argued that Rorty's work is best described as post-pragmatism rather than neo-pragmatism.

I also considered how Dewey's analyses of human experience, human-nature symbiotic relations and the social nature of inquiry resolve some disagreements between radical social epistemologists (such as Fuller) and moderate social epistemologists (such as Goldman and Kornblith) on the nature and subject-matter of social epistemology. Dewey's identification of problematic human transactions with nature as the common factor in all forms of inquiry and his consequent presentation of metaphysics as a road-map for epistemology, cause Fuller's argument that social epistemology is a new discipline in sociology or social science to lose its strength. Dewey's claim that a social epistemology is continuous with traditional epistemology is further supported by the preservation of the traditional conception of normativity (in terms of attainment of truth and avoidance of error) in his epistemological naturalism. With Dewey placing inquiry in the secondary cognitive experience (the point where concerted and cooperative efforts are socially employed and the best form of hypotheses for solving

problematic situation are collectively ascertained), the social nature of knowledge is established. From this perspective, the stalemate between radical and moderate social epistemologists on whether social or individual factors should be the focus of epistemological inquiry is bypassed.

Moreover, I also considered the possibility of establishing what could be regarded as the basis for all human knowledge from Dewey's locating the quest for knowledge in problematic human natural transaction within nature. The importance of this position was explored in terms of how it prevents the relativism that becomes unavoidable when the scope of epistemology is made relative to different social contexts as suggested by radical social epistemologists such as Fuller.

Finally, I considered how Dewey's conception of knowledge (as an instrument for manipulating nature) contributes to contemporary debates about whether knowledge is a natural kind. The first point that I established about this debate was that it is ultimately about whether a scientific epistemology can be established if knowledge is established as a natural kind. I then compared the plausibility of Kornblith's contention that knowledge is a natural kind with Dewey's contention that knowledge is a natural transaction and argue that the latter offers more tenable prospects for a normative scientific epistemology. I argued that Kornblith's identifying animal knowledge as the subject-matter of both cognitive ethology and epistemology and then arguing that both are legitimate scientific disciplines is plausible but not strong enough. I identified the weakness of his position as lying in his claim that the human practice of asking for and giving reasons for claims does not mark any significance difference between human knowledge and lower animal knowledge. On the other hand, Dewey's identification of nature as the only subject-matter for both scientists and epistemologists is more plausible. In addition, Dewey's argument that all forms of knowledge play an instrumental or problem-solving role in a way that predictions are engendered, offers the strongest justification that epistemology needs to qualify as a science. Finally, taking a Deweyan approach to knowledge engenders

an inter-disciplinary approach which makes resources in sociology, anthropology, biology, and technological science relevant to epistemology.

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