KNOWLEDGE AND EPISTEMIC JUSTIFICATION: AN APPRAISAL OF ROBERT NOZICK'S TRUTH-TRACKING THEORY

BY

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A Research Submitted in Partial Fulfillment of Requirements for the Award of the

Degree of Master of Arts in Philosophy in the University of Nairobi

November, 2012

DECLARATION

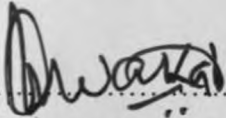This Research is my original work and has not been presented for the award of a degree in any other university.

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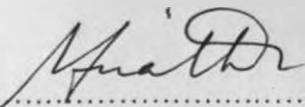
This Research has been submitted for examination with our approval as University Supervisors.

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DEDICATION

With lots of academic love,

to you I dedicate this:

Mama, Dani, Dana,

and yes,

the Peripatetic Wind!

ACKNOWLEDGEMENT

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ABSTRACT

In this study we make an attempt to address the traditional problem of epistemic justification by interrogating Robert Nozick's truth-tracking theory of knowledge. We seek to answer the question: "when and how do we know that we know, or what is it to say that we know?" Plato's traditional analysis of knowledge as Justified True Belief (JTB) has in the course of history proved insufficient to account for the justification of claims we make about reality. The main critic of the theory is Edmund Gettier who argues that JTB may not conceptually be the same as knowledge and vice versa since JTB may include cases of luck and guesswork.

Nozick, in seeking to salvage JTB from Gettier, assumes that the agent already has truth conditions enabling him to track truth. However, in failing to state the truth conditions of his theory, Nozick makes it impossible for the agent to track truth since the agent does not have the conditions of truth. In interrogating Nozick's theory, we seek to appraise the theory to find the conditions of truth the basis of which Nozick founds his tracking formula. The study employs material interpretation of truth-functionality of conditional propositions to establish the truth conditions upon which Nozick's theory is founded. In so doing, the research asserts the primacy of truth in the analysis of knowledge since knowledge is expressed as true propositions.

The study further takes cognizance of social truth and its relevance in the sociological operations of man; to this extent, the study investigates the idea of truth as socially

determined. It is concluded that despite appraising truth-tracking theory by identifying truth conditions of the theory, the problem of confirming truth and its existence is not addressed owing to the set objectives of the study. It is recommended that future researchers should take up the challenge of examining the problem of the existence of truth hence should attempt a formulation of a truth-confirming theory since it is requisite to confirm and explain truth before we can even track it.

DEFINITION OF TERMS

We shall apply the following terms in a particular way in this study.

Knowledge: This term refers to propositional knowledge, i.e., knowledge of truths, for instance, knowledge that such-and-such is the case. It is propositional because knowledge is knowledge of facts expressed as true propositions. Propositional knowledge is commonly presented by the schema S knows that p, where S refers to the knowing subject, and p to the proposition that is known. Propositional knowledge is distinguished from two other kinds of knowledge: knowledge by acquaintance, i.e., knowing a place or a person, and technical knowledge, i.e., knowing how to do something.

Evidence: This is the condition that makes a difference to what one is justified in believing and what it is reasonable for one to believe. In this study, the term evidence and justification are used interchangeably.

Belief: It is used to refer to the propositional attitude we have whenever we take something to be the case. It is a mental state of possessing some opinion about a proposition or about a potential state of affairs in which the proposition is true.

Truth: This refers to the property that accords with that which is such that without this accord, there is no truth. It is reality-dependent such that to know that something is true, we must refer to actual states of affairs.

Epistemic Justification: It is the difference between merely believing something that is true, and knowing that something is the case; it is justification of beliefs or knowledge claims.

Closure: This refers to the skeptic Principle of Closure (PC) or Closure Principle or Principle of Deduction by Justification that holds that knowledge is closed under known logical entailment.

Truth-tracking: It refers to the theory that a belief is considered knowledge if it is sensitive to truth such that if the proposition believed were true in changed circumstances, it would still be believed, and if it were not, it would not be believed.

Agent/Subject: The individual as the knower seeking knowledge of reality.

Counterfactual Theory: The theory that holds that truth need not necessarily be limited to facts; usually expressed in past tense and running contrary to facts. It is expressed as a conditional statement the first clause of which expresses something contrary to fact that has not happened but could, might or would happen, e.g., *If she had seen the bus, she wouldn't have crossed the road.*

Material Interpretation: A common partial meaning of different kinds of conditionals which states that a conditional is true when either the antecedent is false or the consequent is true.

CHAPTER ONE

GENERAL INTRODUCTION

1.1 Background to the Problem

The urge to know has always been a human characteristic from ancient civilizations. History is filled with evidence which demonstrate man's desire and search for knowledge not only of himself but also of that which exists outside of him. This shows that man has expressed the consistent act of striving for knowledge about nature, the cosmos, objects, and indeed events.[1] That man is a rational being is hardly contested nor can it be, hence it is in man's nature that he seeks to epistemically advance towards the desired object of knowledge. In our everyday conditions we attach value to knowledge and regard lack of it valueless since we can hardly make true claims about reality in the latter state. We frequently contrast knowledge with beliefs and opinions, and generally tend to admire those who know as opposed to those who merely believe.[2]

Ordinarily, as human beings, it is of less academic value to ask the question *what exactly is knowledge?* We often leave this to practicing epistemologists who engage in theoretical endeavors. Philosophers, right from the ancient times, plunged themselves in the debate on the nature of what there was, that which forms the fundamental reality of the cosmos and how it could be grasped. This is a fundamental question in epistemology. As the pursuit of wisdom, philosophy seeks to explain reality. However, without knowing what it is that we wish to explain, philosophy becomes an exercise in futility, and we would hardly make good judgment about anything.[3] It is in this spirit that ancient thinkers

sought to discover the nature of knowledge, its limits and scope, its structure, its source and its justification.

The problem of knowledge has elicited diverse opinion; however knowledge traditionally rests upon three pillars. The first is the origin of knowledge, and this concerns the problem of determining the source or foundation of human knowledge. It involves answering the question: *from whence does knowledge come?* Rationalists lay emphasis on pure reason, the mind, as the only and legitimate source of our knowledge. Empiricists hold that all our knowledge begins from experience.[4] The second pillar is the nature of our knowledge, i.e., how our knowledge manifests itself. Objectivists assert the universality of epistemic norms whereas subjectivists restrict epistemic norms to the individual.[5] Whatever position one takes on the problems of the origin and nature of our knowledge, there is always justification for that position thus we cannot judge which position is right and which one is not; it all depends on one's point of view.

The third pillar of epistemological investigations is certitude. It addresses the question whether or not human beings can have certitude in their knowledge of reality. Certitude can be interpreted either as that property of belief that makes it indubitable or the ability of a belief to guarantee truth.[6] It is from this third pillar that arises the definitional problem of knowledge; we seek certitude to knowledge, but *what is it to say this is knowledge?* This question provokes us to attempt a justification of our beliefs. The problem concerning justification of beliefs is also referred to as epistemic justification; it symbolizes the need to offer good reasons for our beliefs to pass as knowledge. The

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concern by most philosophers then has been to define what knowledge is and not just to identify kinds of knowledge.[7] As a problem, epistemic justification has an ancient precedent, eliciting immense discussion in the history of epistemology.[8]

The problem of epistemic justification has its source in Plato's *Theaetetus*. In this dialogue, Plato (c.427BC-347BC) defines knowledge as true judgment with an account[9] (popularly known as justified true belief or JTB as is referred to in traditional analysis of knowledge). It is important to point out that this is strictly concerned with propositional knowledge, that is, *knowledge that*, and not knowledge by acquaintance (knowledge arising from familiarity of things) or competence knowledge, e.g., knowledge of *how* to play a musical instrument.[10]

Plato's epistemic analysis is amplified in his other dialogue, *Meno*, in which he argues "...that true belief is more valuable if it is *firm* since it would always be of advantage to have good reasons [justification] for our belief, for in having them we hold fast to truth."[11] He observes that "...defects of right opinion as contrasted with knowledge are its instability and impermanence."[12] It is Plato who pioneers inquiry into the question of the *whatness* of knowledge, unlike the Pre-socratics. Protagoras and Heraclitus for instance talked about knowledge as an object but never made efforts to interrogate the concept of knowledge as a subject of inquiry.[13]

Plato's thesis has since attracted great debate in epistemology with two main positions emerging: those who affirm the possibility of knowledge, and those who deny such

possibility. Skepticism denies any possibility of knowledge thus we do not and cannot have a justificational structure for our beliefs.[14] Skeptics hold that there is always an infinite regress of justification hence need for total suspension of judgment, *epoche*.[15] Epistemic justification was thus declared both a conceptual and historical problem. After Plato, many in the history of human thought have made concerted attempts to find its solution. Aristotle (c.384-322BC) argued that one does not know a given truth in the fullest sense unless one knows not merely that it is true but also why it is true. He held that to know a given truth in this sense would require a syllogistic demonstration of the given truth.[16] Knowledge ought therefore to be founded upon this syllogistic demonstration. Aristotle is regarded as the fountainhead of foundationalism, a position that holds that epistemic justification is traceable to some bedrock of ideas which themselves do not require further justification.[17] Against foundationalism is the coherence theory that holds that epistemic justification is determined by the mutual supportiveness of propositions in a given conceptual system.[18]

Rene Descartes (1596-1650) argued that knowledge is that which is indubitable hence must be clear and distinct.[19] Descartes' position is both foundationalist [based on the indubitable] and internalist. Internalism, as opposed to externalism, holds that justification is determined by the epistemic agent's perspective, whereas externalism holds that it is determined by factors independent of the epistemic agent.[20] Foundational epistemology is largely internalist, with externalism dominating the works of most contemporary epistemologists.

Immanuel Kant (1724-1804) in distinguishing phenomena and noumena observed that the phenomenal reality can be known while the noumenal reality cannot be known.[21] It seems for Kant that the definitional problem of knowledge is concerned with the latter, but he assumes we know what it is to say that we *know*. Michael Polanyi (1891-1976) argues that all knowledge involves a personal commitment to rationality. According to Polanyi, this commitment "...shapes all factual knowledge *and in the process it bridges* the disjunction [in doing so, the connection] between *the* subjectivity and *the* objectivity."[22] Knowledge then must involve the knower.

For Bertrand Russell (1872-1970) knowledge is that which we firmly believe if it is true, provided it is either intuitive or inferred (logically or psychologically) from intuitive knowledge.[23] A.J. Ayer (1910-1989) defined knowledge in terms of the right to be sure[24] while Roderick Chisholm (1916-1999) from an internalist position defined knowledge in terms of adequate evidence.[25] In all these instances, knowledge is defined in terms of some other concept(s) which are requiring of definitions themselves. This is where the problem of justification comes in. At what point does one stop? Or are we to engage in unending regress?

Edmund Gettier (1927-) in his seminal paper titled *'Is Justified True Belief Knowledge?'* argues that the classical definition of knowledge (JTB), was insufficient to account for knowledge of reality as is conceived. He observes that justified true belief *may not necessarily* account for knowledge hence the need for a further condition.[26] Gettier does not dismiss JTB; he only observes that this definition is too wide thus fails to capture the

essential features of what knowledge is. He examines the traditional analysis of knowledge according to which a subject S (an agent of knowledge) knows that p if and only if p is true, S believes that p is true and is justified in believing that p is true.[27]

JTB thus holds that one knows a given proposition if he not only believes that given proposition which must also be true, but he must have reasons for believing that proposition. Gettier's argument is that it is possible for one to be justified in believing a proposition that is in fact false. The implication is that JTB does not necessarily have to be knowledge and knowledge does not necessarily have to be JTB. This is for the reason that it is possible to have a justified true belief that is mistaken since it arises from sheer coincidence.

The problem with JTB, Gettier argues, is that the truth condition is wanting since one can be justified in believing a true proposition but on false grounds. Gettier problem refers not only to actual but also to possible situations in which a person has a belief that is both true and well supported by evidence but fails to be knowledge. In his critique, he expresses two points on justification: one, that a person may be justified in holding a false belief, and two, that for any proposition p, if S is justified in believing p and p entails q and S deduces q from p and accepts q as a result of this deduction, then S can be said to be justified in believing q.[28]

Gettier problem asserts that a combination of justification, truth and belief is insufficient to capture the essential features of knowledge. He points out that there is an aspect of

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knowledge missing even with this combination. JTB consequently fails to establish the jointly sufficient and individually necessary conditions for knowledge thus Gettier's conclusion that JTB is inadequate to account for knowledge because it is too general.[29]

To assert the insufficiency of Plato's analysis of knowledge, various epistemologists have constructed counterexamples to the JTB definition, modeled on Gettier's original counterexamples. These counterexamples have come to be known as the Gettier-type cases/counterexamples. For instance, while walking along Parliament Road in Nairobi, Tidi glances at a City Clock and based on what he sees comes to the belief that it is 5 O'clock in the evening. Unknown to him, the clock stopped functioning exactly twelve hours ago hence by that sheer chance it is indeed 5 p.m. Tidi's belief that it is 5 p.m. is therefore actually true. He is also adequately justified in believing that it is 5 p.m. since his glancing at the clock informed his coming to the belief that it is 5 p.m. However, Gettier argues that intuitively Tidi's case is not a case of knowledge in spite of his having a justified true belief.[30] The reason is that if Tidi had glanced at the stopped clock a minute earlier, he would still have come to the conclusion that it is 5 p.m. when actually it is 4.59 p.m. For this reason, a justified true belief may involve luck hence cannot be submitted as a good account of what knowledge is.

Gettier therefore successfully points out the weaknesses in Plato's analysis. However, he does not give us the necessary condition for a justified true belief to qualify as knowledge. He is satisfied with pointing out the error but he does not propose a solution. As a result of this, there have been varied responses to the Gettier problem with

contemporary epistemologists attempting a good epistemic analysis that would stand invulnerable to Gettier-type cases and at the same time explain the possibility of knowledge against skeptic assertions. Epistemic justification as a problem then is one that seeks to investigate, discover and understand what it is for one to say that he knows.

American philosopher Robert Nozick proposes an externalist theory of knowledge that not only shows that knowledge is possible and can be defined, but also that builds an argument against the skeptic hypotheses. Through his analysis, he hopes to achieve objective certitude elusive to internalist theorists and at the same time avoid problems faced by his fellow externalist theorists. Nozick proposes a truth-tracking theory according to which a belief is considered knowledge if it's particularly sensitive to the truth of the proposition believed. This way it tracks the truth such that if the proposition were true in changed circumstances it would still be believed, and if it were not, it would not be believed[31]. Being 'true in changed circumstances' refers to a situation in which initial factors making one to come to a given belief are no longer the same but one still comes to the same true belief.

Truth-tracking asserts that knowledge is essentially modal in character thus requiring subjunctive conditionals. A subjunctive conditional asserts that a proposition is considered true due to its possibility of being true in close possible worlds or situations. Nozick is only concerned with close possible worlds because whether or not a proposition is true in possible worlds further from the actual world is irrelevant to the truth of a subjunctive.[32]

He holds that a subjunctive conditional $p\square\!\!\rightarrow q$ doesn't say that p entails q or that it's logically impossible that p and not-q; it only says that in the situation that would obtain if p were true, q also would be true. It states that given p, q would follow, that in a situation where p were true q would equally be true.[33] This makes it impossible for p to be true and q false; in other words, a conditional that has its antecedent p true and consequent q false cannot be true. Nozick observes that actual true belief is insufficient for knowledge since true belief in some range of counterfactuals is also required.[34]

He points out that truth-tracking asserts the anti-luck property of knowledge, a property lacking in the Gettier cases that makes a knower's belief fail to track truth. Nozick observes that Gettier cases are not cases of knowledge because if S's belief that p were false, S would still believe that p, or if S's belief that p were true in changed circumstances, S would no longer believe that p.[35] In these cases, a knower's belief that p is insensitive to the truth of p; tracking then is required for our knowing a given proposition p.

From this, it is inferable that our belief that p ought to track p [a factual condition] in order to know the essential traits that make p what it is. Analogically, a hound chasing after its prey does so by tracking the scent of the prey. If the prey turns south, the hound turns south; if it turns north, the hound goes north. Whichever direction the prey takes, the hound tracks it until the hound catches up with it. This is only possible because the hound 'knows' and is able to feel the scent of the prey. Having knowledge likewise

requires that our beliefs track truth (as a primary condition for knowledge) just as the hound tracks its prey; in other words, without truth, we cannot have knowledge.

Nozick's theory appears to provide an escape route to a possible solution to the problem of epistemic justification. Since our study is concerned with finding good reasons for epistemic justification, we seek a position that enabled our analysis boost and refine the understanding of truth-tracking in a manner that rebuts Gettier's critique of Plato. This in our view provides a viable tool in attempting a solution to the definitional problem of knowledge.

1.2 Problem Statement

The assumption that true belief necessitates a further condition to convert to knowledge is manifest in nearly all epistemic analyses. The need for a further condition indispensable for knowledge is triggered by Gettier according to whom JTB lacks the sufficiency requisite for knowledge. Gettier however does not tell us what this condition is thus leaving it upon us to determine what it is to say that we know. Our concern therefore is how to fill this gap: what is this further condition necessary for knowledge? Nozick's truth-tracking theory assumes that a belief cannot track truth and at the same time fail to account for knowledge, and further that a false belief cannot track truth in whatever circumstance. The central thesis in the theory is that knowledge requires tracking such that to have it our beliefs must track truth. He holds that truth-tracking is the sufficient condition for knowledge, and that the theory also accounts for a unified analysis of knowledge, both contingent and necessary truths.[36]

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Now, if we conceived knowledge as something that is analyzable in a unified way as Nozick does then we must adopt the view that knowledge is an absolute system, and this view ought to have a clear basis upon which it is anchored. However, Nozick does not give us the basis of the assumptions that inform his unified concept of knowledge. The problem then is that he fails to make known his assumptions; he does not give us the conditions of truth for he assumes we already know what truth is.

The difficulty with the theory therefore is that since we do not know truth, we would not be able to know it if we encountered it, or else how would our beliefs track something we are ignorant of? If we conceded that our beliefs can track truth without the conditions of truth being known to us, then we would be arguing to the conclusion that our beliefs can track both knowledge and error. In other words, we would not be able to distinguish knowledge and error since such a distinction would demand that we at least know what truth is. Further, the assertion that a belief is considered knowledge if it is true and that it is true because it is believed is circular hence guilty of *petitio principii*. With this circularity, it becomes difficult to provide conditions of that which is true.

Another problem with truth-tracking emanates from its claim that it expresses the idea that knowledge is intuitively anti-luck. Gettier cases generally point to the opinion that knowledge is incompatible with luck,[37] and based on this Nozick proposes truth-tracking which he argues affirms the anti-luck principle. However, Nozick's claim that truth-tracking is anti-luck has faced opposition, the main objection coming from Duncan Pritchard.[38] Pritchard argues that whereas knowledge is intuitively anti-luck as Nozick

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says, truth-tracking sometimes fails to express the anti-luck character of knowledge.[39] The plausibility of this theory in solving the definitional problem is therefore put to question. The objections raised trigger us into investigating the foundations of truth-tracking, the claims leveled against the theory and how all these fit in the definitional problem of knowledge.

1.3 The Objectives of the Study

Generally, our study seeks a solution to the problem of epistemic justification by interrogating Nozick's theory of truth-tracking. Specifically, this research seeks to:

1. Investigate possible limits of the truth-tracking theory.
2. Evaluate the epistemic basis of the truth-tracking theory.
3. Examine the effectiveness of the truth-tracking theory.

1.4 Justification and Significance of the Study

The motivation of this study arises from the generally held belief that knowledge is possible and that it can be explained. This belief is evident in nearly all societies and civilizations of the world thereby not restricted to culture, time or place. This is a clear affirmation that knowledge is fundamental in human development, and that of more essence is the belief that knowledge itself can be investigated and defined. Despite lacking philosophical unanimity the belief that knowledge is possible therefore seems to conform to our everyday experience and our common sense view of reality.

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The notion of epistemic justification however is highly contested at the philosophical level hence making it difficult to define knowledge. This study is an invitation to a proper examination of the issues herein. It is a quest to identify the most tenable thesis on knowledge, a concept whose clarity can only be expressed in a theory that adopts a panoramic approach to the definitional problem.

The existing theories of knowledge and/or justification have not adequately attended to the definitional problem of knowledge. This has created the impression that the concept of knowledge is itself obscure. The study is significant since it not only seeks to examine the concepts and principles informing existing theories (particularly Nozick's truth-tracking) but also attempts a sufficient definition of knowledge.

The definitional question is said to be a major concern epistemologists, both traditional and modern. This shows how significant it is to attend to this problem that has become chronic in epistemological circles, from Plato to date. Knowledge, being central to every science, is indeed vital for intellectual, social, cultural and political growth. However, if it cannot be defined, it leaves the skeptic impression that it is unknowable, an impression that militates against the very end we seek. It is for this reason that we aim to identify sufficient conditions for knowledge.

1.5 Scope and Limitation of the Study

At the core of this study is the problem of epistemic justification in contemporary epistemology. The issues herein will demand a theoretical analysis from an entirely

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philosophical standpoint. The key texts outlining the basis of this research include Plato's *Theaetetus*, Edmund Gettier's *Is Justified True Belief Knowledge?* and Robert Nozick's *Philosophical Explanations*. In Nozick's work, we limited our discussion to the chapters addressing the definitional problem of knowledge hence particularly restricted our study to interpreting Nozick insofar as his truth-tracking theory is concerned. We limited this study to the area of epistemology and logic, the latter of which informed our interpretation of Nozick's theory.

With the texts outlined we were able to obtain both historical analysis of the problem, and further investigated the theoretical nature of the problem. These texts therefore formed a pedestal from which we clearly interrogated the theory of truth-tracking and the various concepts in epistemic justification, and further developed a deep analysis of the problem to acquire a more refined definition of knowledge.

1.6 Literature Review

Epistemologists have made efforts to solve the definitional problem of knowledge. Traditional analysis of knowledge is internalist thus approaches the problem by adopting a theory of justification according to which the justification condition in JTB ought to be strengthened for the analysis to account for knowledge. Externalists however argue that justification is not a necessary condition for knowledge hence they suggest a replacement of the justification condition entirely with some other condition. For externalists, the definitional problem can be solved if we adopt a theory of knowledge rather than that of justification.[40]

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Descartes in *Meditations on First Philosophy* proceeds from a foundationalist position to seek certitude in terms of doubt. He argues that epistemic certitude is guided by a light of the intellect and as a result the rational illumination empowers one to see very unmistakably with the eye of his mind.[41] For Descartes, justification requires reflection on contents of one's own conscious mind since it's through this that one acquires the indefeasibility condition. True knowledge is founded on certainty hence it is marked by indubitability.[42] Through this method, he acquires knowledge of the self as a thinking thing, hence his dictum: *cogito ergo sum* (I think, therefore I am).[43] His analysis of knowledge lays emphasis on certainty and as a result favors knowledge of those things that can be known by reasoning and not by appeal to our sensory evidence.[44] His theory is internalist hence fails to account for objective certitude.

Ayer in *The Problem of Knowledge* argues that the truth condition is insufficient for knowledge and that this deficiency cannot be converted to adequacy even with the addition of a further condition that the subject must be completely sure of what s/he knows. He argues that claims to knowledge of empirical propositions can be validated by reference to perception but observes that this is insufficient for knowledge.[45] For him knowledge must involve the right to be sure such that a subject S is said to know that p if and only if S has the right to be sure that p.[46] Gettier observes that if Ayer's "right to be sure" is substituted with "justified in believing that" then it fails to give us conditions for knowledge that we seek.[47] Further, Ayer's "right to be sure" involves the element of blame yet this is only proper to moral rather than epistemic language.[48]

In *Knowledge: Undefeated Justified True Belief* Lehrer and Paxson embrace the notion of knowledge as indefeasible. Knowledge is conceived as the right kind of justification. In the Gettier cases, epistemic defeat exterminates the power of the justification to translate a true belief into knowledge. Knowledge must therefore be indefeasible. Such a condition requires that for a subject S to know that p there should be no defeaters for S's justification for p. Gettier cases are not cases of knowledge because there are certain truths which would have destroyed the believer's justification had he believed them.[49] This theory is at risk of subjecting epistemic justification to infinite regress since "...new true beliefs can be added piecemeal *to* overturn existing justification while there remain further truths in the background waiting to overturn the overturning *truths*."[50]

Chisholm in his *Theory of Knowledge* observes that there is something defective about justification of p in the tripartite (JTB) analysis. The defect lies in the available evidence since it would still sufficiently justify a false claim. From an internalist position he proceeds to state the property of justification as something recognizable on [rational] reflection. His interpretation of internalism is in terms of the accessibility of justification as contrasted with mental states internalism.[51] Chisholm advances an analysis of knowledge using the concept of "more reasonable than"[52] to state his notion of "adequately evident" beliefs. For him, a subject S knows that p if and only if a belief p is evident for an agent S, and p is entailed by a set of propositions that are known by S.[53] To argue that a known proposition must be evident to the knower, in Chisholm's technical sense, is to seek a condition too strong to account for justification. This undermines our

knowledge of inductive generalizations since such kind of generalizations are never evident to us in that manner.[54]

Externalism suggests that knowledge requires objective certitude which is unaccounted for by internalist theories. Externalists therefore reject traditional phenomenological theories and instead propose a naturalistic account of knowledge. According to this account knowledge is derived from successful functioning of our epistemic equipment comprising perceptual, memorial, introspective and rational instruments.[55] Naturalistic epistemology emphasizes *a posteriori* analysis based on the application of methods, results, and theories from the empirical sciences. However, naturalistic theories differ in terms of their conception of the relationship of empirical science and epistemology.

W.V.O. Quine in *Epistemology Naturalized* regards epistemology as part of psychology hence proposes a replacement naturalistic theory. He holds that all facts related to the process of understanding must be reduced to natural facts. Traditional normative epistemology has failed to find sufficient conditions for knowledge. The only way to acquire these conditions is to look outside to natural sciences like psychology.[56] Jaegwon Kim[57] argues that Quine's theory undermines the normativity of epistemology since epistemology is not descriptive but rather prescriptive and analytic. Whether Quine commits the naturalistic fallacy as argued by Kim is left for further investigation.

Alvin Goldman argues that epistemology should not be construed as part of science as claimed by Quine, rather epistemology only seeks assistance from science. His externalist

position holds that knowledge ought to be viewed either as appropriately caused belief or reliably grounded true belief.[58] In his essay *A Causal Theory of Knowing* Goldman proposes what he calls a causal condition for knowledge. He observes that in the Gettier cases S does not know that p despite the fact that p, and the reason for this is that there is no causal connection between the fact that makes p true and the belief that p is true. A causal connection would therefore eliminate the coincidence in the Gettier cases.[59] This theory only accounts for empirical knowledge and not a priori knowledge. Further, there are cases in which something causes one to have a true belief as a result of chance.[60] His analysis then is vulnerable to Gettier cases.

The position that analyses of philosophic concepts are to some extent informed by one's culture has gained currency in some quarters. Analysis of knowledge, by virtue of the nature of the problems therein, thus demands an interrogation of the concept of knowledge in light of culture. The argument is that these concepts are derivable in culture, and to understand the concept of such a thing as truth we ought to subject it to the lenses of culture. All practices which seek to produce knowledge are part of human culture thus bound to culture-immanent norms of rationality.[61] This gives us the impetus to investigate the concept of truth vis-à-vis culture, and whether truth can be restricted to culture without losing its universality.

In *Truth as Opinion*, Kwasi Wiredu advances the position that truth is nothing but opinion thus objectivist theory of truth is incorrect. He holds that any given claim to truth is only an opinion advanced from some specific point of view. He argues that if truth is categorically

different from opinion then truth would be inexpressible. His use of the term opinion differs from the notion of opinion as mere belief; instead he argues that by opinion he means a thought that is firm rather than one that can be doubted. For Wiredu, truth entails opinion but not every opinion is true.[62] Wiredu's argument differs from the largely held thesis that truth and opinion are two different concepts. We must attempt a deeper investigation of his theory to locate its strength in the analysis of truth as a primary condition for knowledge.

H. Odera Oruka in *Practical Philosophy: In Search of an Ethical Minimum* disagrees with the positions that truth is categorically different from belief on one hand, and on the other, that truth is identical with belief. He agrees with Wiredu that the former position inevitably makes truth inexpressible, but points out that the latter position is incorrect since if truth were indistinguishable from belief then no statement would be false.[63] According to Oruka then, "...for any proposition to be true there has to be at least an assumed or a given criterion which the proposition must fulfill; and if it fails to fulfill it, the proposition must be rejected as false."[64] He therefore holds that for a proposition to be true it must be compatible with this criterion, and every assertion agreeing with this criterion would be considered true. How we come to this criterion however remains difficult to determine.

Fred Dretske[65] presents a counterfactual analysis of knowledge based on the subject's conclusive reasons for his belief. Truth is counterfactual in the sense that it is conceived as contrary to facts; it need not always be limited to facts. One could say, for instance,

that "Had I known, I would have studied Criminology"; this statement expresses something contrary to facts – the fact that he has not studied Criminology. Dretske's analysis is regarded a weaker version of the original Conclusive Reasons[66] regarded as overly stringent hence making knowledge a rare occurrence. For him one has warranted belief that p [and therefore knows that p] only if one has a conclusive reason for p.[67] Contrary to Dretske it is argued the theory fails to bring out the element of conclusivity identical with knowledge thus his theory is too weak to account for knowledge.

Nozick in *Philosophical Explanations* seeks to solve the definitional problem of knowledge from an externalist perspective. He appreciates Goldman's intuition that Gettier cases should be solved by dis-acknowledging accidentally true beliefs but abandons the stringent element of Causal theory since truth-tracking "…countenances any way, causal or not, as long as its conditions are fulfilled."[68] He employs Dretske's idea that knowledge is essentially modal in character hence the need for conditions that are subjunctive in nature. A condition is subjunctive if it asserts that were something the case, something else would be the case. With the subjunctive conditions, Nozick seeks to assert the element of conclusivity lacking in Dretske's theory.

He interprets knowledge intuitively as 'truth-tracking' by seeking a method of belief-formation that yields knowledge to be subjunctively sensitive to the truth-value of what is believed.[69] Nozick's analysis holds that a subject S knows that p if and only if the following conditions hold:[70]

i. p is true

ii. S believes that p

iii.   If p weren't true then S wouldn't believe, via method M, that p

iv.   If p were true in changed circumstances then S would still believe,

        via method M, that p

Nozick adopts the possible worlds account of subjunctives according to which "...a subjunctive is true when in all *close* [nearby] possible worlds in which p is true, q is also true."[71] His case against the skeptic is firmly grounded on his subjunctive analysis. He argues that the skeptic's Closure Principle that holds that knowledge is closed under known logical entailment is false. For him, knowledge is not closed under known logical entailment hence it is possible to know a given proposition p, which implies a further proposition q without knowing that proposition q.[72] Nozick's theory is unique as it establishes a logical rather than a causal relation between epistemic conditions. This reinforces the theory as it adopts the clarity and precision synonymous with logic as a system of thought.

Certain scholars however have sought to disprove the plausibility of truth-tracking. Duncan Pritchard in *Anti-Luck Epistemology* argues that Nozick's sensitivity condition, unlike safety condition may sometimes fail to accommodate our anti-luck intuitions, and cites Ernest Sosa's[73] counterexample to that effect.[74] Jonathan Vogel in *Subjunctivitis* holds that the virtues of Nozick's sensitivity condition are merely apparent and in fact generate unwanted results. He argues that despite having the motivation to solve the

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problem of misleading evidence, truth-tracking fails to accomplish this task. According to Vogel, the tracking condition also fails to account for inductive knowledge.[75]

B.J. Garrett in *Nozick and Knowledge* argues that truth-tracking does not account for contingent truths as claimed by Nozick.[76] Crispin Wright in *Keeping Track of Nozick* is concerned with Nozick's argument against the skeptic. He thinks Nozick fails to employ the illuminating trait of his analysis in demolishing inferences drawn by classical forms of skepticism.[77] In investigating the epistemic limits of the theory, we shall make an attempt to attend to the objections raised, with the ultimate aim of solving the problem of justification of beliefs.

1.7 Theoretical Framework

The concept of justification has attracted varied opinions as to its meaning and role in defining knowledge; an elucidation of the concept is deemed critical to the definitional problem of knowledge. Epistemological discussions revolve around two positions on the concept of justification. The position that justification is something internal to a subject's mental states is an internalist position. In this sense, justification is determined by the phenomenal traits of an agent's mind hence mental states that are phenomenally identical are regarded justificationally identical.[78]

The view that knowledge is founded on that which is external to the knower is an externalist notion of knowledge. Externalism asserts that these factors are independent of the agent implying that knowledge is a process that relates the subject and the object.

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Externalists are faced with the challenge of establishing what external factors determine a subject's knowledge that p.[79] The problem of epistemic justification thus is characterized by the divergent and seemingly irreconcilable positions of internalism and externalism. As a result, the assumption has been that striking a solution out of these positions is pretty much illusory.

We observe that classical epistemologies fail to account for objective certitude and this is attributed to their internalist-phenomenological approach to justification. Phenomenology is the structure of experience or consciousness hence investigates consciousness as experienced from the subjective viewpoint.[80] Externalism, mainly seen as modern, breaks from these classical theories by embracing a non-foundationalist approach to epistemic analysis. Externalism attempts a theory of knowledge by replacing the justification condition, unlike internalism that seeks to solve the definitional problem by strengthening the justification condition in JTB.[81]

In replacing the justification condition with some other condition, externalism holds that justification is not a necessary condition for knowledge. Externalism thus is a theory of knowledge rather than of justification. It generally interprets epistemic justification from a naturalistic position thus requiring a causal connection between the knower and the known thus transcending the subjective realm to the objective.[82]

With the publication of David Lewis' *Counterfactuals* in 1973, counterfactual theories of knowledge have gained popularity in current epistemology. These theories transcend the

factual interpretation of truth characterized in foundational epistemology and in naturalistic accounts of knowledge. Counterfactual analysis is one that runs contrary to facts and expresses what actually did not occur. It is usually expressed as a hypothesis hence truth is regarded as not restricted to facts. In a counterfactual analysis, one modifies a factual antecedent and then evaluates the consequences of that modification.[83] Epistemologists have employed *'possible worlds'* semantics for counterfactuals according to which truth conditions for propositions are viewed in terms of similarity relations between possible worlds or their [the propositions'] probability of occurring.

Possible worlds in this context refer to maximally [or highest possible] consistent sets of propositions having no independent reality. Counterfactually, the statement 'if A were the case, C would be the case' is true in the actual world if and only if in those possible worlds in which A is true, C would also be true.[84] Nozick's theory is informed by the counterfactual analysis in formulating his truth-tracking theory. The investigation of truth-tracking theory functions within the larger counterfactual conditions of determining external factors that account for knowledge. Nozick's theory thus proceeds from externalist position but specifically employs a counterfactual rather than a factual analysis of truth.

1.8 Study Hypotheses

This research is guided by and tests the following hypotheses:

1. That, truth-tracking theory is inadequate in its conception of epistemic justification of our beliefs.

2. That, truth-tracking theory can be refined to effectively account for epistemic justification of our beliefs.

1.9 Methodology

This study was conducted from a purely analytic standpoint, interrogating concepts and arguments relevant to the research. Since the study demanded a deep textual analysis, it was limited to library data, specifically books and journal articles significant to the study. The research was built on a conceptual analysis of the problems therein hence it demanded a critical approach. Besides this, it demanded interpretation of texts to bring out meaning of concepts and terms used in different contexts.

1.9.1 Hermeneutic Method

Philosophy without doubt is an inherently interpretive undertaking, investigating into the meaning of words and concepts in order to have a lucid grasp of philosophic problems. The interpretive nature of philosophy therefore requires a method capable of creating a context within which meaning can be conferred upon words and concepts. This method is the hermeneutic method, proposed as a philosophic method by German philosopher Martin Heidegger and popularized by his student Hans Georg Gadamer.[85]

Hermeneutics is the art of human understanding and interpretation of texts. Hermeneutics offers a conceptual underpinning needed in this study and therefore deepens the theoretical foundations of research. Gadamer states that hermeneutics is not a theory that seeks to develop a procedure of understanding, but rather to clarify the interpretive

conditions in which understanding takes place. It therefore seeks to educe understanding.[86] The relevance of this method in qualitative inquiry is its search for understanding rather than explanation or conceptual analysis of texts. In this study, we adopted an interpretive approach to epistemological concepts to bring out a clear understanding of the various epistemic concepts.

1.9.2 Analytic Method

Philosophy is analytic thus epistemology, by virtue of being one of its branches, adopts the same approach. Hermeneutics does not involve a conceptual analysis since it restricts itself to textual interpretation.[87] There was a further need to adopt analytic method besides the hermeneutic method. The implication of appropriating and integrating hermeneutics with the analytic tradition is meta-philosophical. The analytic method seeks to demonstrate something by investigating its foundations or its first principles. Analysis involves breaking down complexes into simpler elements hence it's a process that in some way involves reduction. This feature of analytic method dates back to Aristotle who employed the method in constructing his theory of syllogism.

With the development of modern logic, Gottlob Frege and Bertrand Russell emphasized on the role played by logical analysis in philosophical investigations. The two recognized the transformative or interpretive dimension of analysis, i.e., that any analysis must take a particular framework of interpretation.[88] The two methods employed in this research therefore complemented each other in our quest for meaning.

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CHAPTER TWO

KNOWLEDGE AS JUSTIFIED TRUE BELIEF

2.0 Introduction

In this chapter, we investigate the basis of the notion of knowledge as justified true belief (JTB) by seeking a link between JTB and truth, and further a link between truth and reality. This will enable us to understand what it is to have knowledge of reality, and thus be able to distinguish knowledge from error. We herein assume that it is vital to inquire into the idea that knowledge is justified true belief in order to establish the problem regarding justification of beliefs. This demands that we first define JTB after which we must question the foundations of JTB: why does Plato define knowledge as JTB? What informs his definition? In essence, we analyze Plato's conditions of truth that lead him to define knowledge as JTB and the shortcomings of that definition, if any.

To know if a belief is true demands that we first investigate if the belief in question indeed affirms or agrees with reality. It means that it's only from such investigations that we acquire new information, or precisely, we *know*. Knowledge thus stands as a function of truth in the sense that it is derived from truth. Truth on the other hand is a function of propositions; and propositions, a function of judgments. It is only statements that can be true or false, in other words, statements are truth-apt.[89] Understanding the epistemic basis of JTB therefore entails investigating what it is to say that something is true. Let us first investigate the notion of JTB.

2.1 Knowledge as Justified True Belief

In *Theaetetus* Plato attempts a definition that establishes and expresses what best accounts for knowledge, and through Socratic dialectic, interrogates concepts that explain what knowledge is. In this dialogue, Socrates and Theaetetus analyze three possible definitions of knowledge, i.e., knowledge as perception, as true judgment and finally [knowledge] as true judgment with an account. They settle on the third definition appreciating what the definition says of knowledge.[90] The third proposal informs the basis of our study for it fundamentally contributes to contemporary epistemological narratives.

Plato is concerned with an investigation on the nature of knowledge which entails not simply citing kinds of knowledge but rather attributing to knowledge conditions that sufficiently express what it is.[91] The problem with citing kinds of knowledge is that logically, examples are neither necessary nor sufficient for any definition. We cannot for instance, define the term 'university' by giving examples of universities in Kenya, Canada or wherever. In defining a term we therefore must ensure that essential characteristics of that term are clearly expressed in the definiens.[92] A definition must state the entire denotation of that term, neither less nor more; and such denotation should state both the genus and differentia of the term.[93] Here, we pick the larger class to which the term belongs (genus) and the attribute distinguishing it from that larger class (difference); for instance, man is defined as a rational (difference) and animal (genus).[94]

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Defining knowledge further demands a conceptual understanding of what it is to know or what knowing essentially constitutes. In this study, epistemic justification strictly concerns propositional knowledge and not competence knowledge or knowledge by acquaintance. Competence knowledge is basically knowledge of how to do a particular thing; for instance, knowing how to ride a bicycle. Knowledge by acquaintance on the other hand arises out of familiarity with events, things, places, people, etc.[95] If I am acquainted with Nairobi city, I am said to know Nairobi city, meaning I am familiar with its streets, buildings and other essential features. But propositional knowledge concerns knowledge of facts; it is knowledge of how reality is. Generally, epistemologists are concerned with knowledge insofar as knowledge of propositions is concerned.

The first proposal equates knowledge to perception.[96] Knowledge as perception derives from the Heraclitean doctrine that all things are in motion[97] and the Protagorean thesis according to which man is the measure of all things. For Heraclitus, since everything is always changing into something else, it is not possible to know reality in itself. No knowledge [beyond perception] is therefore possible because knowledge demands for its object the permanent and unchanging.[98] Protagoras had implied that everything was the way it appeared to an individual, and this confirmed the supremacy of the senses in knowing reality in itself.[99] However, the Protagorean thesis lead to relativism since "...each person is himself the one who can judge the things he does judge and they're all correct and true."[100]

Knowledge as perception does not state what accounts for knowledge. It is possible that one can perceive an object without in itself knowing it, in the sense of having knowledge of what it essentially is.[101] Since one can perceive without knowing what an object essentially is, perception doesn't necessarily involve the grasping of truth. It is therefore difficult to show that in perceiving, we can have knowledge of something whose truth we do not necessarily have.

The second proposal is an attempt to derive knowledge beyond mere sensation, somewhere in the realm of thought, as an intellectual apprehension of reality. Now, to apprehend reality we must *at least* be able to commit ourselves to a true judgment/belief of reality. This second definition basically affirms that knowledge is true judgment;[102] judgment being "...an activity of the mind by itself, exercised upon the reports of the senses and using common terms."[103] Judgment is of two kinds; good and bad. A judgment is good when it is free from error and thus reveals reality in itself but a bad judgment impedes our view of reality in itself – it only reveals error. If the former holds, we have knowledge; if the latter, we have error. For Plato it is difficult to determine an account of false judgment, a concept given as impossible.[104] We think this is not the case because a false judgment is simply a mis-statement of fact, and in fact Plato later alludes to this in *Sophist*, stating that false judgment occurs when one attributes to an object some quality other than the one it actually possesses.[105]

True judgment does not sufficiently account for knowledge due to the method by which it is acquired. A true judgment, if accidentally acquired, fails to filter knowledge from

error. A true judgment that is accidental does not give us knowledge because it is arrived at independent of the facts. It only happens to be true because it expresses the facts even though the arguer arrives at that judgment independent of the facts.[106] Through persuasion, one can bring his audience into a state of true belief without bringing them into a state of knowledge. In this case the opponent does not know even though what he is persuaded of is true. In his theory, Nozick attempts to solve this problem by ensuring that the subject-object relation is well grounded on a belief's sensitivity to truth. The sensitivity condition ensures that a true judgment is non-accidental such that one would still come to that true belief even if circumstances were different in certain ways.[107]

The basis of the third proposal is the notion that true judgment requires an account to support it: knowledge is true judgment with an account. Whereas Nozick seeks this account in the sensitivity condition supported by some external method, Plato seeks it in the justification of a true belief. In Nozick's theory, the account is externalist, in Plato's it is internalist. In *Theaetetus*, the assumption is that an account eliminates the possibility of accidentally arriving at a judgment which is true. This way, it is demonstrable why a true judgment funded with an account is knowledge while that without an account cannot be said to be knowledge.[108] But what is it to say that something is an account of something else?

An account is the fact of having an answer to the question "why?" It basically provokes a justification for 'true belief' hence the popular reference to Plato's "true judgment with an account" as "justified true belief", or simply "JTB". In the *Republic* Book VI Plato

observes that giving an account of something evidently involves not only saying what it is but also showing its relation to some first principle; it explains *why* something is what it is.[109] Aristotle separately equates 'account' to the Greek *logos* which involves explaining and analyzing complexes into their simplest elements that cannot be further analyzed.[110]

In *Meno* Plato says that true judgment is unstable hence we must combine it with reasoning as the *why* of it, in order to translate it to knowledge. "Reasoning as the *why* of it" is having a good reason or explanation for what he holds.[111] Our concern is how to identify good reasons or what it means to have a belief for a given reason. In answering the question "why", we seek good reasons, and therefore, justification for our beliefs. This demands a lucid method to, and conditions of knowledge. Whether the method and conditions of knowledge are internal or external (factual or counterfactual) shall inform the basis of our analysis. This shall further inform our investigation of truth-tracking theory of knowledge by questioning whether the conditions for knowledge are determined by factors external to the subject as Nozick proposes. We endeavor to illustrate why Nozick thinks that having good reasons for our beliefs requires assertion of a counterfactual correlation of truth and belief based on some reliable method.

2.2 The Epistemic Basis of Justified True Belief

The truth condition is central in locating the basis of JTB, and of knowledge generally. The truth condition in JTB asserts that in knowing that *p*, one already agrees with *p*, and thus his idea of or about *p* is true. The centrality of truth in the definitional problem

demands that we demonstrate what truth is and how it relates to our belief claims. In this light, there is the claim that whereas knowledge involves an intimate relation between us and reality [the knower and the known], truth does not obviously involve such relation.[112]

This, we argue, is inaccurate because in making true statements we come to grasp facts about reality and this means that it is the facts that are independent of us, and not truth. We therefore treat truth, just like knowledge, as relational to the subject in the sense that to have knowledge, we must first *have* truth. However, a true statement does not rely on mental states of the subject but rather has an independent factual reference. Truth then is incorruptible by the fallibility of our mental states.[113]

For instance, we know there is oil in Turkana, given the discovery of oil by Tullow Oil Company and subsequent news from the Government on the same.[114] The statement "there is oil in Turkana" is therefore a true statement. We then can firmly state that we *know* there is oil in Turkana; we consider this a statement of fact. This fact is independent of us whether or not Tullow Oil Company or anybody else knew it. However, to know that there is oil in Turkana the truth condition must be met such that if the statement were false, we wouldn't know even if we made such a claim. In fact, we would only be mistaken to think that there is oil in Turkana. Mistakenly believing that something is the case is nothing but error; we therefore either know or don't know. To know something is the case demands our having some relation with the object.

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Now, truth as a concept in traditional epistemology attracts different interpretations. The correspondence theory of truth interprets truth as conformity of a proposition to fact or reality. A proposition is true if it affirms the facts since truth strictly speaking is an affirmation of what *really* is. Truth thus is correspondence between a proposition believed and reality; reality being that from which our ideas derive hence independent of our ideas. In this vein, the nature of the mental state one intends his ideas must be identifiable with the nature of the object to which those ideas refer.[115]

Aristotle affirms such conformity when he states that truth is "...*to* say of what is that it is, and of what is not that it is not."[116] Correspondence theory, given its conditions, accepts the biconditional "it is true that p if and only if p", and through this we establish the primary features of the world.[117] Based on this biconditional, 'being' and 'being true' are interchangeable concepts since "what is not true does not exist *because to be* and *to be true* are convertible."[118] Our analysis of truth as a relation between the knower and the known, characterized by good judgments accommodates the correspondence theory of truth; this is because such relation affirms some actual state of affairs.

Correspondence displays the epistemic intimacy between the subject and the object such that in correctly judging sensible objects the mind gives us knowledge. A proposition in corresponding to facts makes the subject know the facts. The subject/knower then has a justified belief that corresponds to the facts, in spite of whether he is aware there exists such a correspondence.[119] Now, if all we need for a justified belief to be true is to ensure

it corresponds with facts then Plato's JTB appropriately draws from a correspondence view of truth.

JTB conditions demand that the subject's belief should be justified and should conform to facts; if it doesn't conform to facts, it is error and there is no knowledge. This is evident in Plato's general epistemology according to which knowledge exists when there is correspondence or relation between the mind and the forms. And since forms are the only real things, knowledge cannot have as its object that which does not exist.[120] We then cannot have knowledge out of a false proposition since belief in falsehood is nothing but delusion, error and misapprehension. As we shall observe, Nozick develops further this idea, holding that a false belief cannot track truth; and goes ahead to formulate an analysis of knowledge identifiable with the ability of a belief to track truth.[121]

Interpreting the truth condition in JTB in terms of correspondence depicts Plato's epistemology as empiricist, yet Plato asserts a rationalist analysis of knowledge, evidenced in his theory of forms. Correspondence theory may therefore not suitably assert Plato's epistemology because of the difficulties it runs into, among them being the challenge of identifying the meaning of the term itself.[122]

Another traditional concept of truth is coherence. Perhaps JTB is founded on coherence theory of truth. The theory holds that coherence of the available evidence determines the truth of a belief. Not only must the knower believe that p, and possess adequate justification that the belief is indeed knowledge, the belief ought to correctly cohere with

the entire relevant body of beliefs. This in essence expands a subject's scope of judgment.[123]

Coherence theory defines a true proposition as one that belongs to a designated coherent set of propositions. In other words, a true proposition must cohere appropriately with other propositions.[124] For a justified belief to be true, it must be such that it belongs to a given coherent set of propositions or system of propositions. When a justified belief is supported by some other belief then that support attests to its truth; it is not only justified but also true. This theory adopts a relational feature of truth as dependent on and in some sense constituted by the mind.[125] However, if truth requires nothing but coherence then for any set of experiences, it will always be possible to construct other sets of beliefs that contradict the initial set of beliefs. But how would we determine a set of beliefs as true since contradictions can both hold as true at the same time?[126]

Interpreted from a pragmatic perspective, a justified belief is true if it is useful to hold the belief; truth here is conceived in terms of utility. The usefulness in holding the belief is expressed in terms of the practical value of knowing that such-and-such is the case. A true proposition therefore is one that works, i.e., one that thrives in practice.[127] The theory affirms our ordinary conception of knowledge that it is always useful to know rather than not to know at all; knowledge and truth are useful in achieving some practical end. Pragmatism is considered a development of empiricism and a censure of rationalism; it pulls us away from the abstract concept of truth, bringing us closer to reality – to the

practical consequences of our beliefs.[128] In reducing truth to utility, pragmatism is rather self-serving and subjective since utility is dependent upon the individual.

We limit the search for the epistemic basis of JTB to the three theories which we consider primary in any analysis of truth. Other theories like the semantic and deflationist theories of truth are herein treated as deriving from correspondence. Semantic theory, for instance, emphasizes on the importance of language in defining truth, and employs a correspondence understanding of a sentence as true only if it is satisfied by all objects and false otherwise.[129] The theory however doesn't fit our philosophical analysis since it is more linguistic than philosophic in its approach to truth. It thus makes truth language-determined since it only applies to sentences of certain restricted formal language.[130]

That said, we must acknowledge that the different theories attempting an epistemic basis of JTB typify the complexity that involves analysis of truth characterized in the history of philosophy since scholars, in attending to the question of truth, seek different yet internally related ends.[131] Our concern is whether this relatedness makes it possible for us identify a clear basis of JTB. How do we identify this relatedness from what seems unrelated epistemic paths?

We propose that the epistemic basis of JTB is open to interpretation from any justifiable perspective, depending on the inquirer. However, we lay preference in a correspondence analysis of JTB provided we conceive knowledge as a relation between mind and facts. It's because the idea of agreement of propositions to facts best captures the notion of

truth as a function of propositions, and propositions a function of judgment which in turn give us knowledge, provided we have a good judgment.

2.3 Analyzing Conditions for Knowledge

Philosophy as a conceptual activity involves investigating into the logical meaning of concepts that bear great relevance to its study. To address problems emanating from philosophic discourse, we ought to subject these concepts to analysis and elaboration, in turn giving us an insight into their meaning. The JTB definition of knowledge is no exception; we need to critically analyze it to establish and understand its meaning. But this we cannot do without investigating the JTB conditions for knowledge. We have partly done this with our focus on the truth condition which we have argued is *sine qua non* for knowledge since knowledge is interpreted in terms of truth, (regardless of the theory of truth). In JTB other conditions for analysis are belief and justification; we seek to discuss them in terms of JTB in order to relate them with knowledge.

Justification condition of JTB holds that for a subject S to know that p, S must have adequate evidence that p as one condition for his knowing that p. It is this condition that gives a subject the ability to justify his beliefs since in justifying his beliefs one seeks evidence for his claims. Israel Scheffler observes that justification condition serves to distinguish knowledge from mere [unjustified] true belief. Knowledge then is something more than true belief for one should be able to support his belief in a suitable way.[132] In so arguing, he verifies Plato's justification condition.

Now, this condition demands a rational commitment to the evidence with which we reinforce our claims. In having evidence for a given belief, one is said to be justified in holding that belief such that without the evidence one cannot be justified in holding the belief. Evidence therefore forms the basis for the justification of one's belief; take an "XYZ" case in which X believes that Y is responsible for the death of Z. X's belief that Y is the killer demands that X justifies [by way of availing adequate evidence] that Y murdered Z. If every piece of evidence points to the possibility that Y murdered Z, then X has good reasons to believe that Y murdered Z. This case affirms Richard Feldman's position that justification exists in having a belief that fits the evidence one has; meaning that one has a justified belief only if that person has reflective access to the evidence that a belief is true.[133] Justification thus is generally viewed as a matter of having evidence [or that it relies upon evidence] and as a result the two are regarded to have a strong connection with evidence.[134]

Relevant to the "XYZ" case is Roderick Firth's interpretation of the connection between justification and evidence in terms of a rational commitment in holding a belief. To decide whether X knows that Y murdered Z, we must decide whether or not X is justified in believing that Y murdered Z; and further, if X believes that Y murdered Z we must decide whether X's belief is based *rationally* on the evidence he has.[135] But Firth does not tell us how we ought to decide. Usually decision-making is an invitation to deliberating on the issues at hand – we ought to weigh whether or not to act in a given manner. In this context, deciding requires that we first know and are able to determine whether one's

evidence affirms his conclusion. This means that it is necessary that there exists a plausible connection between one's evidence and his conclusion.

These analyses of the evidence condition limit us to a factual understanding of evidence. We shall observe that Nozick holds a different position; the view that to know if the given evidence is strong requires that one interprets the evidence in a counterfactual sense. Evidence for a belief is considered strong if it would still hold in close possible worlds in which the statement for which it is evidence still holds, and if the statement does not hold in those close possible worlds, the evidence would cease to offer support for the statement. Evidence thus fits in the general counterfactual analysis of knowledge by virtue of a belief's capacity to track truth through some reliable method. For Nozick therefore, evidence – just like truth, transcends the actual state of affairs to the possible state of affairs.[136]

The other condition in JTB holds that a subject must at least believe the proposition he asserts for him to have knowledge of the facts represented by that proposition. It means that if S knows that p, then S believes that p such that one should not claim to know a given proposition without at least believing it is true.[137] The concept of belief, alongside that of truth, is central in the traditional analysis of knowledge, with its centrality being amplified in contemporary epistemological debates. Nozick affirms this in reducing the analysis of knowledge to a counterfactual correlation of belief and truth.[138]

The ordinary understanding of belief is that independently, belief is inadequate in the knowing process. However, the belief condition in JTB asserts that believing and knowing are perfectly compatible even though believing is not equivalent to knowing.[139] In equating doxa (belief) to opinion and episteme (knowledge) to something more than opinion, Plato shows that the two are not equivalent.[140] Plato argues that knowledge is not only a consequence of cognition but also the faculty to produce it, while the senses limit us to opinion.[141] We understand belief to mean something different from knowledge. Belief does not necessarily affirm the state of contingent world and in fact requires truth for the evidence upon which it rests to affirm such facts.[142] Accordingly, believing has a purely psychological reference whereas knowing transcends the mental state to the reality outside. Knowing is a relation between the subject and the object, connected through good judgment.

Let us focus on the necessity of belief condition; why would we have belief as a condition for knowledge if it is not equivalent to knowledge? In expressing knowledge of a fact one is said to possess a doxastic attitude toward that which he claims to know.[143] To have a doxastic attitude is to believe that such-and-such is the case, for how would I know if I did not believe at first? Underlying the notion of belief is the problem of defining it, the problem that comprises demonstrating what it is to say that one believes that something is the case. There are different positions on this; one such is pragmatism.

Pragmatism views belief as dispositional thus leading one to act in certain ways, and holding that belief always conditions one to act in a certain way. This is reductionist for it

diminishes belief solely to practice yet we can believe without necessarily expressing it in action. Besides, there are occasions in which we act, not out of personal beliefs, but rather out of convenience or fear of certain consequences.[144]

Verbal theories of belief propose that believing a fact is a matter of having some verbal response. Such theories construe belief as a disposition to make certain linguistic response; it is a disposition that offers an affirmative response to certain sentences in appropriate conditions. To say, for instance, that Adipo believes that *p*, is to say that Adipo is disposed to respond affirmatively to some sentence which is a close translation of *p*.[145] Verbal theories limit belief to only those epistemic agents capable of linguistic response. Besides, it is one thing to produce names by verbal response and another to know the names by a reasonable criterion.[146]

Reducing belief to either practice or speech is restrictive since either way we do not give off a wholesome manifestation of belief. A comprehensive analysis of belief perhaps may prove fruitful. We could say that belief is revealed in both word and deed.[147] This position, at one stroke, appears sufficiently comprehensive, but it actually isn't. There are other means of expression besides action and speech, for instance aesthetics and other art-forms. An artist painting city walls with political graffiti shares his belief that the government has a moral duty to serve the people; and he *probably* knows the same.

To encompass all possible forms of human expression, we propose a communicative theory of belief. Man is naturally a communicative being and relates with the world

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through expression; he therefore communicates, directly or in a veiled sense, in almost everything he commits himself to. In so doing, he expresses his belief. A comprehensive understanding of belief tells us what it is to believe or at least approximates belief.

A clear analysis of belief assists in analyzing the belief condition in Nozick's theory and its relation with the truth condition. In truth-tracking, a belief is relevant for our knowing provided it is sensitive to truth of the propositions believed such that if it is not; it fails to track truth. Belief and truth then must go together, via some reliable method, transcending the [f]actual state of affairs to the counterfactual state of affairs.

2.4 Is Justified True Belief Knowledge?

The traditional analysis of knowledge proposes three conditions without which we cannot claim to know for they are deemed necessary and sufficient. The investigation we have so far carried out revolved around their necessity and not their sufficiency *per se*. We now know that JTB holds that belief, as a purely psychological activity, requires truth to assume objectivity, and that true belief must be tied down to some good reasons hence the need for the justification condition.

We've also observed that of the three conditions, truth is primary for knowledge stands to truth as a shadow to its object; without the object, there is no shadow. Knowledge then is knowledge of facts at least expressed as true statements. This, we noted, explains why knowledge is a function of truth. Until now, the JTB script seems clear and acceptable.

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The question however is whether JTB appositely defines what knowledge essentially is; is JTB *sufficient* for knowledge?

Edmund Gettier argues that JTB does not avail those conditions sufficient for knowledge hence it fails to account for what knowledge really is. The central thesis in Gettier's argument is that defining knowledge as justified true belief does not capture the essence of knowledge hence JTB is not knowledge-affording. Gettier observes two presuppositions in the traditional analysis of knowledge: that one could be justified in believing a false proposition, and that justified belief is closed under known logical entailment.[148]

The first presupposition admits that justification is not necessarily truth-sensitive in the sense that one may not always be justified in believing a true proposition. This presupposition reverberates in Nozick's theory; he recognizes that justification condition not being necessarily truth-sensitive can lead to one's believing a false proposition and this disqualifies justification (as expressed in JTB) as a necessary condition for knowledge. His sensitivity condition ensures that a false belief cannot be sensitive to truth;[149] he deals with the defect in the first presupposition.

The second presupposition affirms the principle of Closure which holds that if one for instance, is justified in believing his tribe is Maasai, and he observes that this implies necessarily that he has a tribe, then he is justified in believing that he has a tribe. Gettier endeavors to show that one can have a justified belief from which he deduces another

proposition which turns out to be true for some unknown reasons, with the initial justified belief turning out to be false. It is then possible to have a justified belief but of a different proposition of which one is ignorant.[150] It means that one can have a justified true belief but still fail to have knowledge. Below is a standard Gettier-type counter-example to the JTB analysis of knowledge:

> Falsafa, a philosophy student in the University of Nairobi, has an appointment with her Epistemology professor at the department at exactly 5.30 p.m. However, she arrives an hour late and suspects he may have left and probably the burglar door is locked. She casts her eyes in the direction of the door and on seeing a big lock from the inside she concludes the door is locked. However, unknown to her, the big lock is actually non-functional and is strategically placed there by the departmental secretary to give a false impression and to discourage would be intruders from attempting to break in. Falsafa is unaware that there is in fact a small lock actually functional but bolted just below the non-functional big lock. It's the case that the door is in fact locked as she thinks.

It is evident that Falsafa's belief is both justified and true, yet we find it unconvincing to say it is a case of knowledge since had the big lock been left unbolted she would have come to a totally different conclusion. The gist of Gettier's argument is that knowledge is not conceptually equivalent to justified true belief, and as exhibited in the above

counterexample, one can draw a reasonable inference from a justified albeit false belief, thereby inferring something true by accident.[151]

Two generic features of the Gettier cases are fallibility of justification and luck. In Falsafa's case for instance, the 'big lock' justification despite offering good support for the truth of the belief that the door is locked, this justification is not accurate. It indicates strongly that the belief is true without proving conclusively that indeed it is. Falsafa's case is also a well-but-fallibly justified belief that turns out to be true; however there is a great deal of luck on how Falsafa comes to the true belief that the door is locked. The presence of the functional small lock does not contribute to the truth of the belief yet it's critical since without it, the belief wouldn't be true.

The existence of Falsafa's justified true belief is very much fortuitous. It is therefore wrong to hold that any actual or possible case of knowledge that p is an actual or possible instance of some kind of justified true belief that p and that any actual or possible kind of a justified true belief that p is an actual or possible instance of knowledge that p.[152] Justified true belief therefore is not necessarily knowledge and knowledge is not necessarily justified true belief.

Gettier's argument punctures the JTB analysis. It provokes questions as to what condition is lacking to qualify justified true belief as knowledge. Nevertheless, we are not satisfied with Gettier's argument for he fails to give us the indicators with which to identify those conditions conceptually sufficient for epistemic justification. Gettier only points out that

there is a problem with JTB, and goes no further; he leaves upon us the load of formulating a tenable analysis of propositional knowledge. It is this Gettier burden that we seek to offload by attempting a solution to the problem of epistemic justification. In seeking a solution to this problem, we are out to establish an analysis that does not accommodate luck or fallibility of justification. We are out to establish an analysis that solves the problem of misleading evidence in Gettier counter-examples, like Falsafa's case above.

CHAPTER THREE

SOLVING THE GETTIER PROBLEM

3.0 Introduction

In this chapter, we seek to identify the gaps in Gettier's critique of the traditional analysis of knowledge. The concern with Gettier's argument is not what he says of JTB but rather what he fails to say about knowledge. To say that JTB is insufficient for knowledge is itself insufficient; he ought to identify those conditions that make JTB sufficient for knowledge. But he fails to do this, hence appears rather skeptic. We are of the opinion that we ought to transcend Gettier and identify an epistemic analysis invulnerable to his counter-examples. Nozick's truth-tracking is an invaluable tool for epistemic justification, hence is central to this study. However, Nozick does not formulate his theory in a vacuum; we need to interrogate different epistemic analyses to afford an understanding of the conceptual challenges of defining knowledge.

There are certain factors that contribute to Nozick's formulation of knowledge as truth-tracking. First, is the traditional analysis of knowledge as JTB; secondly, Gettier's critique of JTB – it pivots JTB and contemporary debate on the definition of knowledge; thirdly, the internalist-externalist (I-E) debate on the conditions of knowledge. Internalist theorists argue that justification is limited to the knower's mind whereas externalist theorists argue that we ought to refer to phenomena outside of the mind (some external factors) if we are to have knowledge. The I-E debate is significant in any inquiry into the problem of epistemic justification. The debate enables us to investigate different

conceptual analyses in order to highlight the backdrop against which Nozick formulates his theory.

3.1 Is Gettier Problem a Pseudo-Problem?

Contemporary epistemologists have adopted the now popular "definition-counterexample" method of conceptual analysis of epistemic justification. Conceptual analysis involves embracing a philosophical notion and then advancing an attempt to discover a set of conceptually necessary and sufficient conditions for the notion being exemplified. With this method all one needs to refute a claim of conceptual necessity and/or sufficiency is a mere conceptual possibility. Gettier employs this method to demonstrate there is a conceptual possibility that one could have a justified true belief but fail to have knowledge.[153]

Gettier's analysis has drawn out reactions as to the nature of epistemic justification. Whereas some scholars agree with Gettier on the insufficiency of JTB, others think that Gettier's is nothing but a pseudo-problem. W.V.O. Quine, for instance, has reservations on the solvability of the Gettier problem due to the idea of "conceptual truth". He argues that since claims of conceptual necessity can be easily refuted, then the idea of conceptual truth is weak because it is equally easily refutable. So if the very notion of conceptual truth is infirm, then to seek conceptual truths about knowledge is obviously misguided.[154] It is contested whether Quine actually makes the Gettier problem unsolvable. He doesn't lay bare the problem with Gettier's conceptual method that sets it apart from any other strictly conceptual pursuit to understand reality.[155]

Gettier employs hypothetical cases to question the epistemic worthiness of JTB. Hypothetical cases can be treated as fantastical hence unlikely to occur since they are merely conceptual. However, it is possible that these cases despite being hypothetical are nomologically possible hence some cases are actually possible. It is possible to have a belief that is both justified and true but one arising from sheer chance. In fact in everyday life, people do actually have such beliefs. It is therefore escapist to say that the Gettier problem reflects neither the possible nor the actual.[156]

Contrary to Gettier, there is the opinion that his cases are actually not counter-examples to JTB since they fail to satisfy the justification condition. This involves demonstrating that the cases only tell us that no amount of conventional evidence suffices for complete justification. It further entails showing that the evidence in Gettier cases is not the right sort of evidence despite being strong to count as knowledge-giving. Complete justification demands both strength and structure of justification, and a relation between the two. However, it is provable that this relation demands that no amount or strength of evidence short of entailing evidence would do unless the justification were also not defective in Gettier's characteristic way.[157]

These objections do not convincingly give us reasons to treat Gettier's case as a pseudo-problem. We seek to rescue JTB from Gettier by discovering the further condition(s) for the sufficiency of JTB, and in the process solving the problem of epistemic justification. An in-depth analysis of the internalist and externalist theories of knowledge is therefore

necessary. Externalism is particularly significant because Nozick's theory develops from it.

3.2 Internalist Analyses of Knowledge

In the modern period of philosophy, Rene Descartes sought to identify a method by which we could come to absolute certitude of our knowledge of reality.[158] With Descartes, philosophy broke from the past, coming up with new problems particularly on the nature of what the self and reality were thus demanding a review of the problem of knowledge. This had great impact since philosophy primarily concerns the nature of reality and the prospects of human beings in it. The Greeks had generally argued that man and nature were inwardly related, a position most amplified in Aristotle's theory of hylomorphism according to which the material and the immaterial were involved in all natural existence, separable only by abstraction. Descartes thought differently, proposing dualism of natural existence; that the material and the immaterial were two opposites, with no internal relation.[159]

To prove this, he proposed an impeachable method that not only secured knowledge but also showed the untenability of the skeptic thesis that no knowledge was possible. He held that the *raison d'être* of philosophy lay in its attempt to lift us from the realm of probability to that of knowledge (certitude), failure to which philosophy did not achieve aim.[160] In his philosophical investigations, Descartes made certain observations that anticipated contemporary epistemological debate on the nature of justification of our beliefs. He formulated the methodic doubt by which to discover an unshakable

foundation upon which knowledge is established.[161] Knowledge, established upon an

unshakable or indubitable base, should be interpreted as indefeasible. For him then

justification condition required that one's evidence justifying his beliefs must be

indefeasible since indubitability of our beliefs characterizes our knowledge.[162]

Descartes' position is internalist, informed by his rationalist notion of knowledge. The

history of epistemology is characterized mainly by two notions of justification:

internalism and externalism. Internalism generally holds that justification of our beliefs

supervenes upon introspectively accessible properties of the believer; it is derived from

elements that are internal to the agent's perspective. Internalism builds from rationalism;

the mind is central to our knowledge of reality since it is the source of that knowledge.[163]

Externalism on the other hand holds that a belief is justified if it is a product of a reliable

method or process thus whether or not the agent is justified in believing something does

not actually count.[164] Cartesian analysis is permissive insofar as knowledge acquired

through reasoning is concerned but is rather restrictive when we appeal to sensory

evidence. It is because indefeasibility condition is too strong to account for knowledge

gained from sensation.[165]

Cartesian indefeasibility is evident in the epistemic analysis of Keith Lehrer and Thomas

Paxson. In *Knowledge: Undefeated Justified True Belief* the duo adopt an internalist

position in proposing a fourth condition to strengthen the justification condition such that

there should be no defeaters for a subject S's justification for a fact p.[166] They argue that,

"...if a statement h completely justifies S in believing that p, then this justification is defeated by another statement q IFF: i) q is true, ii) the conjunction of h and q doesn't completely justify S in believing that p, iii). S is completely justified in believing q to be false, and iv) if c is a logical consequence of q such that the conjunction of c and h does not completely justify S in believing that p, then S is completely justified in believing c to be false."[167]

This means that a defeater is a true proposition that if added to S's evidence, would render S no longer justified in believing p, for one reason or the other. It is a particular fact that defeats a body of justification thereby creating a new body of justification which fails to provide firm support to convert true belief to knowledge. The failing within any Gettier case is a matter of what is *not* included in the individual's evidence, and thus some significant fact is absent in his evidence.[168] In the case of Falsafa in the previous chapter, the reason why her belief is not knowledge is because her evidence that the door is locked includes no awareness of the fact that there is a small lock that is functional just below the non-functional lock.

Lehrer and Paxson hold that knowledge is either basic or non-basic. Whereas in basic knowledge one knows that a proposition is true without having the belief justified by some other proposition, in non-basic knowledge one knows that a proposition is true since there is some other proposition that justifies his belief. Basic knowledge is justified true belief while non-basic knowledge demands a further condition to the justified true

belief analysis since JTB can be countered by some other proposition that defeats it.[169] Lehrer and Paxson propose an analysis of non-basic knowledge according to which a subject has non-basic knowledge that p if, and only if,

> i). p is true   ii). S believes that p iii). there is some statement h that completely justifies S in believing that p and no other statement defeats this justification.[170]

This analysis provides an extension of the requirement that there should be no relevant falsehoods condition as espoused in Lehrer's 1965 *Knowledge, Truth and Evidence*. No relevant falsehoods condition asserts that there is no knowledge in Gettier cases because one includes something false in her evidence.[171] Jonathan Dancy nonetheless thinks that an extension of indefeasibility condition to no relevant falsehoods is of no real advantage since the difficulty with indefeasibility lies in the manner in which "...new true beliefs can be added piecemeal *to* overturn existing justification while there remain further truths in the background waiting to overturn the overturning."[172] Indefeasibility condition thus is likely to lapse into infinite regress of justification.

No relevant falsehoods condition also leads to skepticism since it is always the case that there is some false evidence being depended upon, at least implicitly, as we form our beliefs. Its proponents assume we must have infallible beliefs in order to know, yet this is impossible because naturally man is fallible. A way out of this perhaps is to weaken this condition, but this doesn't solve the problem either. Linda Zagzebski for instance argues that "...whereas a strong *indefeasibility* condition threatens the independence between the

justification and the truth conditions since the belief held can always be undermined by new information, a weak *indefeasibility* condition would only succeed *in being* vulnerable to the Gettier counter-examples."[173]

Evidence is critical in one's justification for believing a given truth. Its criticality is displayed in Roderick Chisholm's analysis according to which an evident proposition is one that is justified. In Chisholm's analysis, a proposition is evident if it is made logically very probable by another proposition held responsible for its being evident. Chisholm says that a proposition could either be *adequately* evident or *defectively* evident. A proposition is defectively evident when everything that makes it evident also makes some false proposition evident.[174]

Chisholm uses the concept of "more reasonable than" to elucidate the notion of "adequate evidence". A proposition is reasonable at a given time if believing it is more reasonable at that given time than withholding belief in that proposition. An evident proposition is one that is reasonable for a subject at some given time *t*, and there is no other proposition such that it's more reasonable for one to believe that other proposition at *t* than it is to believe the first proposition.[175] Chisholm is pointing to certain logical relation between these two concepts, "reasonable than" and "evident" in the sense that if something is evident then it is at least reasonable, and to know a proposition demands that the proposition is itself evident.

A further explication is necessary: suppose Riwaya says he knows that (*p*) either Sango has a PhD in Philosophy or Aisha is in Mtwapa. He says he knows that Sango has a PhD in Philosophy because Sango himself told him so, and Sango is generally a reliable friend of Riwaya's. But Riwaya has no idea of the whereabouts of Aisha and randomly picks a town in Aisha's county. The truth however is that Sango has a PhD in Philology and by sheer chance Aisha just arrived in Mtwapa that morning. The first disjunct is false, the second is true. The proposition (*p*) 'Sango has a PhD in Philosophy' is made evident by the proposition (*e*) 'Sango is always a reliable friend'. From this, *e* makes *p* evident for Riwaya, but any proposition that makes *e* evident for Riwaya equally makes a false proposition evident for Riwaya since it's not actually the case that Sango has a PhD in Philosophy.[176]

Chisholm formulates a definition of knowledge that would exclude defective evidential support for propositions. For a subject *S* to know that *p*, the following conditions must be fulfilled:

i). If *p* is a basic proposition for *S*, *S* believes *p*, and *p* is true, then *S* knows that *p*.

ii). If *S* believes *p*, *p* is true, *p* is evident for *S*, and *p* is entailed by a set of propositions that are known by *S*, then *S* knows *p*.

iii) If *S* believes *p*, *p* is true, and a proposition that is known by *S* and that doesn't justify any false proposition justifies *p*, then *S* knows that *p*.[177]

The third condition ensures that if one knows a given proposition p, then there's a proposition e such that e justifies p but doesn't justify any false statement. This offers a solution to the problem of misleading evidence characteristic of the Gettier cases.[178]

Chisholm submits that justification need not be deductive but fails to tell us that non-deductive justification may not be truth-preserving since the conclusion could be false though the premise true.[179] If Chisholm's "makes evident" were interpreted as "makes very probable" then his analysis fails since he limits justification to inductive interpretation. The language of probability is not equivalent to that of certainty. If we gave the term "very probable" a numerical value accumulating to "more than 0.999 probable" then every proposition would make some false proposition evident.[180] As we shall discuss, in Nozick's analysis, evidence is interpreted differently; he avoids Chisholm's problem by establishing evidence on a reliable method for both inductive and deductive inferences.

A.J. Ayer proposes an analysis of knowledge as the right to be sure arguing that the condition of truth is insufficient for the epistemic agent's knowing a given proposition. He argues that this insufficiency persists even if we said one must be completely sure of what one believed. This is in bare contradiction to Nozick's analysis firmly built on the truth condition. For Ayer, to know a given proposition p, one must possess the right to be sure, besides p being true and one believing that p is true.[181] Statements regarding contingent facts of the world demand a further necessary condition besides being supported by our perception, memory or scientific laws. Ayer is not concerned with

claims to phenomenalistic knowledge since such claims raise problems of their own as we observed in Chapter Two.

He argues that intuition and truth-claims drawn from predictions do not qualify as knowledge because there is no clear basis upon which such claims are arrived at; there is no rational account for arriving at those claims. There has to exist a clear path to knowledge and this is what Ayer calls 'the right to be sure'.[182] A claim must be true and one must be sure that the claim is true. 'Being sure' is no different from belief condition in JTB thus one must have no doubts.[183] 'Having the right to be sure' fills the gap between mere true belief and knowledge.

But what is it to say that one has the right to be sure? What does a 'right' consist in? An epistemic agent has the right to be sure if the situation is such that one's claim to knowledge conforms to certain standards. To know if a claim conforms to certain standards, one must show how he came to the given claim. This demands that one should be able to "...put forward some other statement which supports the statement of which knowledge is claimed, *and it* is implied that this second statement is itself known to be true."[184] Now, we may argue that this harbors a possible risk of seeking infinite regress of support but Ayer thinks that this is not possible since sense-statements acquire support from the fact that we experience them. Justification of our beliefs thus derives from experience and it is only from this that we acquire the right to be sure.[185]

The problem with Ayer's analysis concerns the appropriateness of the term 'right' since to do something which one has no right to do bears an implication of blame; we ought not to do what we have no right to do. One who is sure when he has no right to be sure is subject to blame, yet the element of blame strictly speaking is inappropriate in knowledge claims. For instance, it would be inappropriate to blame a child for claiming to know a given truth because even though the child is sure, he lacks the grounds for holding that truth.[186] Secondly, Ayer's 'right to be sure' condition simply asserts the 'justified in believing that' condition in JTB hence may fall victim to Gettier cases.[187]

The analyses so far examined adopt an internalist approach to the problem of justification of beliefs. As earlier mentioned, internalism is inward looking, asserting that by reflecting upon his own conscious state one could formulate a set of epistemic principles enabling him to justify his beliefs. This implies that people whose mental states are similar must be justified in believing the same propositions; however, this is hardly the case. Internalism also faces the problem of objectivity since justification is interpreted in terms of one's [subjective] conscious states,[188] without considering external factors outside the subject's conscious states.

3.3 Externalist Analyses of Knowledge

Externalism emphasizes on the necessity of transcending the mental realm to the factual; it takes into consideration factors outside the agent's mental states. Externalism expresses not only the realist position that objects have a mode of existence that is in certain way not dependent on the mind but also that the factors that determine our knowing that we

know reality are to be found outside of the mind. Externalism therefore is outward looking, appreciating that there is always a constant interplay between the knower and the known. Externalism asserts a naturalist position that facts about the subject's knowing cannot be determined by the conscious state of the subject.[189] Causal-reliabilist theories are regarded externalist since they depart from the foundationalist tradition of internalism, as Kwame Appiah notes:

> "...causal theories [do] deny that whether a belief is justified depends on *it being* supported by beliefs in some foundational class. Provided the belief is produced by a reliable method...it is suitably justified."[190]

Naturalistic theories underscore the relevance of empirical method in epistemological investigations. Epistemologists ought to employ results from sciences studying cognition to resolve epistemological problems. There are mainly three kinds of naturalism; the first two are modest naturalistic views; cooperative and substantive naturalism. Cooperative naturalism holds that epistemology can benefit its inquiry by using knowledge gained from cognitive science. Substantive naturalism focuses on an affirmed equality of natural facts and epistemic facts. Replacement naturalism is extreme naturalism, grounding for replacement of foundational epistemology with psychological inquiry. It suggests that we should abandon foundational epistemology and adopt an entirely empirical method.[191]

Quine proposes replacement naturalism arguing that the quest for a satisfactory justification for our beliefs has proved futile [as witnessed in our internalist analysis]. We should cease seeking one and instead construct a scientific account in purely natural

terms without reference to justification. Quine's naturalism is built on the central idea of reliabilism; whereas epistemology prescribes that we ought to derive our beliefs from a reliable method, psychology describes belief-forming processes that are in fact reliable.[192]

Replacing foundational epistemology with naturalized epistemology necessitates the normative, yet without the normative there can never be justification. In the end there is no 'true' because any method to the truth shall have been abandoned with the normative; truth is only comprehensible when the normative is presupposed.[193] Justification is the only notion that captures the defining characteristics of epistemological inquiry, as exhibited in both traditional and modern theories of knowledge. To replace justification with some natural facts is to alter the meaning and goal of epistemology.[194]

That notwithstanding, Quine triggers the urge to question, among other things, the method of epistemological inquiry: is epistemological method prescriptive or descriptive? Epistemology generally deals with knowledge as its object of study and in the process analyzes the nature of experience and what beliefs essentially constitute. Analyzing the nature of experience, sensation and constitution of beliefs is considered as strictly part of psychology. This is insofar as the analysis does not attend to the distinction between truth and falsehood which strictly regards theory of knowledge. Since judgments are expressed in terms of propositions, and propositions logically speaking are truth-apt, then any analysis of judgments already points to a logical aspect of epistemology.

The central problem of epistemology is that of distinguishing true and false beliefs, and of finding an acceptable criterion for true belief.[195] Bertrand Russell in his *Theory of Knowledge* avers that,

> "...*it* [epistemology] takes us through the analysis of belief and its presuppositions, into psychology and the enumeration of cognitive relations, while it takes us into logic through the distinction of truth and falsehood, which is irrelevant in a merely psychological discussion of belief."[196]

There exist relations of epistemology to psychology and logic, and because the latter two employ different methods epistemology cannot be restricted to either. Epistemological inquiry therefore proceeds from both normative and descriptive methods to fit the nature of logic and psychology respectively. Naturalism is relevant insofar as it does not seek a total overhaul of foundational epistemology because we risk losing the normative aspect of epistemology, and therefore truth. But we cannot afford to lose truth, because without it, there is no knowledge. Nozick suitably makes use of this distinction, employing both notions – of truth and reliabilism, in formulating truth-tracking. Whereas truth caters for the normative, reliabilism underlines belief forming process compatible with the idea of knowledge.

Moderate naturalistic accounts acknowledge that epistemology borrows methods of empirical science but refutes the Quinean thesis that epistemological method should entirely be empirical. Knowledge is conceived either as appropriately caused true belief

or reliably grounded true belief. Alvin Goldman, for instance, defines knowledge in terms of causal reliabilism; a fusion of causality and reliability. For a true belief to be appropriately caused, the fact in virtue of which the belief is considered true must play a certain role in producing the given true belief. [197] For instance, if one says he knows Okot p'Bitek's *Song of Ocol* is a poem with many stanzas then its having many stanzas should be a major causal factor, functioning through the knower's memory, in believing that it actually does.

Goldman considers Gettier cases as cases that lack a causal connection between the subject's true belief and the fact that makes the belief true. A belief ought to be causally connected to the fact that makes it true for the subject to possess knowledge. Let's consider the case of Riwaya having strong evidence for the statement 'Sango has a PhD in Philosophy', and on this basis randomly formulates another proposition that 'either Sango has a PhD in Philosophy or Aisha is in Mtwapa'. Seeing that the first statement entails the second, he concludes that the disjunction is true, yet it is clear that what makes the disjunction true is the second disjunct which has nothing to do with Riwaya's believing that the disjunction is true. The defect results from lack of causal connection between the fact that Aisha is in Mtwapa and Riwaya's believing that the disjunction is true.

Goldman argues that JTB is sufficient for non-empirical truths hence he concerns himself with empirical knowledge alone. He employs a theory of perception espoused by H.G. Grice to investigate possible causal connections for empirical knowledge. Grice

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demonstrates that when we say one perceives some given object, there has to exist a causal connection between that perception and the object.[198] For instance, if I said there is green grass in front of Taifa Hall, the presence of the grass must cause my belief that there is green grass in front of Taifa Hall. Causal connection therefore is necessary for us to know some given fact. Goldman's analysis should not to be interpreted to mean that for there to be knowledge the fact p must be the cause of S's belief that p. If it were interpreted that way, then applying it to knowledge about facts of the future would be difficult since there would be backward causation.[199]

However, Goldman's causal analysis is said to be vulnerable to Gettier-type cases since one's true belief that p can be caused by the given fact p yet one may still fail to have knowledge that p. Let's take the following case:

"Nana is in Malindi. She is at a newspaper stand. Suddenly, a newspaper falls off the rack. Nana sees the headline: "Earthquake hits Malindi." She believes that an earthquake has just hit Malindi. Her belief is justified because she saw the headline, and it's actually the case that an earthquake just hit Malindi. Thus, her belief is true. However, the newspaper she read is actually 15 years old. But, her belief that an earthquake just occurred is caused by this earthquake, since the paper's falling from the rack was actually caused by an earth tremor resulting from the earthquake."[200]

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In this counterexample, Nana's true belief is caused but it would be difficult to prove that she knows that there is an earthquake in Malindi. Goldman could perhaps argue that her true belief should have been caused in the right sort of way, but the problem would that of identifying the right sort of way in which one should be caused to believe a fact p.[201]

Goldman's theory is only concerned with *a posteriori* knowledge, causal theories cannot account for *a priori* knowledge. The theory may only make sense in cases of perceptually known truths and generally *a posteriori* truths. For instance, how might what informs the metaphysical truth that if an object, say a tree is taller than another, then the second [necessarily] is shorter than the first, be causally connected with my believing this truth?[202]

Naturalistic analysis of knowledge as reliably grounded true belief is used to bridge this gap since it is believed to accommodate *a priori* knowledge. *A priori* knowledge exists as a result of understanding concepts and their relations, or by deriving some inference on the basis of beliefs grounded in this understanding. Now, such processes are considered reliable, and are both relevant in empirical and *a priori* cases. A reliable method, if properly followed, is perfectly reliable and never leads to a false belief. Naturally, there are hardly any perfectly reliable methods of acquiring beliefs. It is also difficult to demonstrate how to specify reliability of a process to count as ground for knowledge.[203] Besides empirical and rational foundation of knowledge, what else should we consider as reliable?

3.4 Counterfactual Analyses of Knowledge

It seems at this point, that neither internalist nor externalist naturalistic examination of epistemic conditions suffices for knowledge. Knowledge requires some extra factors – some external counterfactual conditions going beyond the factual realm to that of the possible. In this regard, causal-reliabilism demands an interpretation beyond facts. Fred Dretske develops a conclusive reasons or information theory of knowledge, borrowing from counterfactual theories of causation that became popular in the mid twentieth century. Counterfactual theories analyze the meaning of causal claims in terms of the conditional form 'If *A* had occurred, *C* would have occurred.'[204]

Whereas causal-reliabilist theories hold that a belief qualifies as knowledge only if it *was* caused by the state of affairs that renders it true, Dretske holds that a belief qualifies as knowledge if it *would* only have been caused by the state of affairs that renders it true. [205] He equates having conclusive reasons to having information about the truth of a given proposition, and having information involves receiving a signal because it is signals that carry information. An individual's reasons for holding a given belief are conclusive if and only if those reasons would not be true if his belief were false. A conclusive reason then is the kind of evidential relation required for knowledge.[206]

We interpret Dretske's theory as one that holds that knowing demands that we track our reasons, and this is facilitated by our access to information about the fact believed. Nozick borrows this idea of counterfactual analysis of knowledge from Dretske, the difference being in what our beliefs track; for Nozick, it is truth, for Dretske it is reasons.

In Dretske's analysis, the appropriate connection between the knower and the object must carry a conditional probability of one (1) thus reducing any element of accident to zero (0). He implies that knowledge requires a key nomological connection with a conditional probability of 1 (zero equivocation). This however is only possible if we analyzed knowledge in terms of information as information carries truth and truth stands as the core ground for knowledge. The theory appeals to the Lottery Paradox; in a lottery, even though the probability of one's losing is high, it always seems wrong to say you know you are going to lose. This is because although the amount of information related with one's holding a losing ticket is nearly zero, it is *not* equal to zero. [207]

Now, skeptics have sustained their argument against knowledge with the assumption that knowledge is closed under known logical entailment, or else known as Closure Principle. A distinction between Closure and *modus ponens* is necessary here. Whereas *modus ponens* [Latin for "mode that affirms"] holds that if p is true, and p implies q, then q must be true. Closure, on the other hand, holds that if a subject S knows that p is true, and also knows that p implies q, then not only must q be true (*modus ponens*) S must also *know* that q is true. Closure then is stronger than *modus ponens*. [208]

Dretske believes his analysis naturally leads to the failure of Closure. His analysis proposes a condition for knowledge which need not be satisfied by known consequences of what is known. A subject S can have conclusive reasons r for a fact p, without having conclusive reasons for known consequences of p. To say that r is a conclusive reason for

p is to say that r would not be true unless p were true. No evidence therefore transmits to all the implications of what it is evidence for.[209] Anecdotally, it wouldn't look to me as though there was water flowing from the university Fountain if there wasn't water flowing from the university Fountain; my experience of 'fountain' is a conclusive reason for believing that water flows from it.

He argues that information itself is not closed under known logical entailment, thus one can have information about some given fact without having information about known consequences of that fact.[210] One does not have to have information that q in order to have information that p [if p implies q] hence one does not have to know q to know p. The means of discovering p is not necessarily that of discovering what we know to be implied by p.[211]

Dretske's analysis is contested on grounds that it is incompatible with the denial of Closure; the analysis appears committed to the view that the relation of a signal that carries information is itself closed under known logical implication. Suppose there is a perceptual signal that gives you the information that you have two hands, and further that if it is the case that you have two hands then as a matter of implication there is a physical world. Such a signal, by virtue of its implication, also carries the information for you that there is a physical world. For perceptual propositions therefore, information relation is closed under known logical entailment.[212] The theory therefore only builds a case for skepticism.

Secondly, from the theory, if a subject S knows that p, then she cannot regard some given evidence, reason or information for the truth of not-p. This is contested since it is possible that S knows that p but is not at that given time thinking of the fact that she has knowledge that p. This isn't because she may have forgotten that p, but simply for the reason that she isn't just thinking consciously that she knows that p. It is therefore possible that S knows that p and regards not-p as a possible explanation of some given evidence. This implies that Dretske doesn't clearly show us how knowledge entails having conclusive reasons; he doesn't tell us how if one knows that p then one cannot have evidence for holding not-p.[213] Failure to show this is failure to illustrate that knowledge requires conclusive reasons, and therefore, information.

The theories so far discussed fail to identify those sufficient conditions for knowledge we set out to discover. The problem of epistemic justification demands more than these theories give; we must look beyond in order to avoid the difficulties and defects characterized by the theories. All these theories assume the centrality of truth in defining knowledge. We argue that since knowledge is a function of truth, an epistemic analysis must reflect the primacy of truth in defining knowledge thus creating a clear link between belief and truth. We argue that an emphasis on the primacy of truth is firmly supported by a counterfactual analysis.

Nozick acknowledges the primacy of truth and borrows Dretske's counterfactual analysis to augment his theory, at the same time appreciating Goldman's causal-reliabilism. He diminishes JTB conditions to truth and belief, and then runs a counterfactual formula on

their correlation. It is this approach that sets his theory apart from the rest. He seems to have a key to solving the epistemic justification problem. In the next chapter, we take an in-depth appraisal of the theory to establish whether its virtues are real or merely apparent.

CHAPTER FOUR

THE TRUTH-TRACKING THEORY OF KNOWLEDGE

4.0 Introduction

In the previous chapter, we interrogated various theories of knowledge, demonstrating their inadequacy to solve the problem of justification of beliefs. Our observation, if granted, necessitates a further search for conditions individually necessary and collectively sufficient for knowledge. The ultimate goal is to address the question of epistemic justification by identifying conditions that are sufficient for the existence of knowledge. In our view our goal is to establish a viable truth-tracking theory as formulated by Nozick.

In this chapter, we seek to demonstrate Nozick's position that not only is knowledge possible but also that the conditions for knowledge are identifiable thus clearly indicating that skepticism is wrong. Nozick's truth-tracking seems to have the key to demonstrating this. Nozick formulates a theory of knowledge founded on the idea of 'tracking' which emphasizes that knowledge is a real relation between the subject and the environment. Truth-tracking holds that a subject knows a proposition p on condition that p is true, he believes that p is true such that if p were not true he wouldn't believe that p and if p were true he would still believe that p.[214]

His theory asserts the principle that knowledge is correlated to truth hence an analysis of knowledge ought to be founded on truth. But for him, truth should be interpreted counterfactually. A counterfactual formulation of truth holds that truth need not

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necessarily be limited to facts; for a proposition to be true, our beliefs must hold not only in the actual state of affairs but also in the possible state of affairs.[215]

4.1 Knowledge as Truth Tracking

Nozick proposes an externalist theory according to which knowledge is determined by certain factors beyond the knower but which establish a tracking relation between truth and belief conditions. The conditions of belief and truth in JTB require that for a belief to be considered knowledge it must at least be true and justified. These conditions are only necessary hence do not clearly account for what knowledge is. However, JTB demonstrates the significance of truth in defining knowledge and Nozick affirms this in formulating his theory when he introduces an external condition to truth.

He agrees with Gettier that indeed we ought to have some other condition beyond JTB to ensure that our beliefs account for knowledge; we ought to find a way in which truth is tracked. To track truth we ought to place it [truth] outside the person; it's through this that we can find sufficient conditions collectively to account for truth so that even if truth were to change we would still know it. It's in this light that Nozick holds for one to know a given proposition p, the following conditions must be met:

i)   [Proposition] p must be true.

ii)   One must believe that p.

iii)   If p weren't true, one wouldn't believe that p, via method M.

iv)   If p were true, even in changed circumstance, one would still believe that p, via method M.[216]

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The first two are conditions of truth and belief as expressed in JTB. It means that the two conditions are actually relevant in analyzing knowledge, and to this end JTB holds, but in adding conditions (iii) and (iv), Nozick says that Gettier has a genuine case against Plato. By incorporating belief and truth conditions in his truth-tracking analysis, Nozick implies that there is something Plato is saying that is true about knowledge even though Gettier re-awakens us to something else: the fact that we need a strong case for JTB since it's easy for someone to manipulate JTB. In fact, Gettier cases (like Falsafa's case earlier) demonstrate that JTB can actually be manipulated since it's possible to replicate the situation to come up with a true belief that is justified but which rests on a false assumption.[217] It is therefore important that in order to eradicate such possible manipulation, we ought to buttress JTB by employing some external condition.

To accomplish this, Nozick first takes into consideration Plato's conception of knowledge, which he (Nozick) thinks would not allow Plato to believe in falsehood since truth is to be found in the Ideal world. Truth, being in the world of forms, is one and intelligible and the mind corresponds to it.[218] This implies that when we use truth, Plato expects us to make reference to the Intelligible. Technically, Plato is right since if truth is conceived as one and intelligible, then if a knower's belief were not true, he would not believe it is true. It is this understanding of Plato that Nozick employs in formulating the third condition for knowledge (if p were not true, one would not believe that p).[219]

The first three conditions are similar to Platonic conception of knowledge but a rebuttal of Gettier's analysis. But, in and of themselves, they are not sufficient in processing

knowledge, hence the fourth condition that states: if p were true, one would believe that p, even if circumstances were to change. It averts any possible luck for not only is a proposition true and the knower believes it; if it were true, he would believe it.[220]

Whereas the first two conditions of truth-tracking are factual the last two are subjunctive conditionals that express Nozick's counterfactual analysis of truth. A counterfactual is a "contrary to facts" understanding of truth; that technically, truth need not be limited to facts.[221] The statement "If I spoke Lingala, I would enjoy Lingala music" states contrary to the fact that I don't *actually* speak Lingala; hence asserting that were it the case that I spoke Lingala I would definitely love Lingala music.

Built on his counterfactual analysis of truth, condition (iii) and (iv), which are themselves conditional statements, are meant to help a knower track truth. The two conditions guarantee a knower is connected to his environment such that if something were not the case then he wouldn't believe it, and if it were he would believe it.[222] This correlation (between belief and truth) expresses a conditional subjunctively rather than indicatively. A subjunctive conditional asserts that if p were true, q would be true (in symbols: $p\square \!\!\rightarrow q$); the conditional is true if and only if in every possible world in which p is true, q is true. An indicative conditional on the other hand asserts that if p is true, q is true (in symbols: $p \rightarrow q$); this conditional is true if and only if it's not the case that p is true and q is false.[223]

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Since the first three conditions of truth-tracking are insufficient in proving wrong the skeptic's objections, Nozick hopes that with the fourth condition we can beat the skeptic position (that no knowledge is possible), and particularly disprove Gettier who casts doubt on the conditions for knowledge. He hopes that with the fourth condition our beliefs will not only track the truth of ordinary propositions but also truth of skeptic hypotheses.[224]

The skeptic argues that if it were not the case that one is dreaming, he wouldn't believe that he is dreaming. Nozick's third condition is satisfied, but only partly tracks the truth of this (the dream) proposition since if it were actually true that one was dreaming then he would still not believe that he is dreaming. A knower's belief then does not and cannot track the truth of the "dream" proposition. This conditional only tells us how a subject's belief state is sensitive to the falsity of the "dream" proposition but not how it is sensitive to its truth.[225] We shall investigate how powerful condition (iv) is with regard to tracking hypotheses.

Since Nozick aims to cater for not only a posteriori truths but also a priori, condition (iv) is specifically meant to track necessary truths while condition (iii) tracks contingent truths. A posteriori truths are truths that are known from experience while a priori truths are knowable independent of experience.[226] Knowledge of necessary truths doesn't require condition (iii) since the condition gives a possibility of a proposition being false yet a necessary truth cannot be necessarily false. It is therefore impossible to falsely believe a necessary truth.[227] In other words, whereas condition (iii) is meant for

propositions that may turn out to be false, condition (iv) is meant for propositions that are necessarily true hence cannot be false. Therefore the two conditions collectively guarantee knowledge not only of necessary truths but also of contingent truths provided the same method is used.[228]

Truth-tracking, as analyzed above, proves that in the Gettier cases one would still believe that p is true even if p were false. Falsafa's case in Chapter Two demonstrates this. Falsafa comes to the true belief that the Philosophy department door is locked, on seeing the non-functional big lock 'bolted' on the door. The door is actually locked using a functional lock smaller in size, just below the non-functional one; but she does not notice there's a smaller lock below the big lock. Falsafa does not know that the departmental door is locked despite her belief being true; in a possible world in which the door is not locked (i.e., the world in which the smaller lock isn't there), she would still come to the belief that the door is locked. Her belief that the door is locked fails to track truth hence we cannot say that she knows the door is locked.

Nozick says that the two subjunctive conditionals create a specific relationship between the antecedent p and consequent q. His usage of the conditional "if p were true, then q would be true" implies that in a situation that would obtain if p were true, q would also be true; see Table 1 below:

P/S	p	q	p→q
1	T	T	T
2	T	F	F
3	F	T	T
4	F	F	T

Table 1

As illustrated above, the subjunctive conditional "if p were true, then q would be true" does not say that whenever the antecedent p is true then it follows the consequent q is also true. It only says that in a scenario that p is true, then q would [and not must] also be true; strictly speaking, this does not mean that p entails q, or whenever p then q follows, or that whenever p is present then q must be present; here, p is a condition q; see Table 2:

P/S	p	q	p→q
1	T	T	?
2	T	F	F
3	F	T	?
4	F	F	?

Table 2

In Table 2, we see that the conditional is only truth-functional in line 2 when the antecedent is true and the consequent is false. If the antecedent p entails q, then it means that every possible situation in which p is true *is* a situation in which q is also true. The subjunctive conditional only asserts q would hold if p were true, and not that it must hold

whenever p is true, or that it's logically impossible that p yet *not-q* (p and $\sim q$), i.e., a conjunction of antecedent and denial of consequent; the latter would be false as hereunder: see Table 3 (line 2):

P/S	p	q	p→q
1	T	T	?
2	T	F	F
3	F	T	?
4	F	F	?

Table 3

Nozick's analysis of this conditional is expressible in the "possible worlds" semantics of counterfactuals; that in all those possible worlds in which p is true, q would also be true. Basically, for one to know a given proposition, it's not merely required that the proposition is true and he believes it, but that such a correlation of belief and truth conditions continues to hold in possible worlds where p is true.[229] The conditions therefore collectively assert that we know a given fact not simply because we truly believe that fact, but because we would truly believe it and wouldn't falsely believe it.

The task at hand is to establish the basis upon which Nozick says that the conditional "if p were true, q would also be true" is true, if and only if, in a situation that would obtain if p were true, q would also be true. We will also need to establish why he does not use the same conditional to mean that p entails q or that it's logically impossible that p yet *not-q*.

That aside, in his definition of truth-tracking, Nozick invokes a particular method that ought to assist our beliefs to track truth; we investigate the role of this method and how it is significant in the theory. Using a defined method, one can come to a belief that p if p were true but it is likely for one to come to a belief that p even if p were false by employing a different method (from the defined one) that would erroneously direct him to believe that p. Employing two different methods results in a violation of condition (iii) because even if p were false, one would still believe it is true.[230] To fill this gap we need to adopt a reliable method with which to come to knowledge that p. Reliability posits that we ought to employ reliable methods if we are to come to knowledge that p. It therefore demands a method that is subjunctively sufficient for a subject's belief that p and via which the subject knows that p. This method delivers a strong form of reliability.[231]

In proposing that conditions (iii) and (iv) be defined by a clear-cut method, truth-tracking externalizes the notion of justification. One is justified in holding a belief if he acquires it by the most reliable appropriate method. Justification is about applying a better method than any other available, and this is the most efficient way of attaining scientific beliefs. For Nozick, what therefore counts is that a method is more reliable than other methods.[232]

Reliability is characterized by its probability of bringing about true beliefs. Whereas in truth-tracking the correlation is such that we have truths in the antecedent and beliefs in the consequent; in reliability, beliefs are in the antecedent while truths are in the consequent. Thus a belief is reliable when if it was *believed*, via some particular method, then probably it would be *true*. Tracking on the other hand holds that if a proposition

were *true*, then it would be *believed*.[233] Reliability ensures that our beliefs consistently track truth.

In proposing a method with which to come to belief that *p*, Nozick appreciates that epistemology, besides attempting the question of truth and falsity also addresses the question of belief forming processes. Whereas the question of truth and falsity is normative hence logical, the question of reliable belief forming methods is prescriptive hence psychological. This implies that epistemology, as we argued in the previous chapter, is both prescriptive and descriptive.

In Chapter Two we analyzed justification in terms of evidential proof, observing that the two are related. Nozick demonstrates that indeed evidence plays a role in our knowledge of facts. With his counterfactual analysis of truth, he abandons a factual analysis of evidence in JTB. He employs a counterfactual analysis of evidence, holding that evidence for a given hypothesis is some factor that would hold if the said hypothesis were true and wouldn't hold if the hypothesis were false.[234] In linking evidence with knowledge, Nozick asserts that strong evidence has the capacity to track truth for what it is evidence since to believe a given proposition on the basis of strong evidence that is known, is to know that given proposition.[235]

This notion of evidence caters for both deductive and non-deductive inferences. In deductive inference, a proposition *e* is strong evidence for hypothesis *h* only where *e* would hold if *h* were the case and wouldn't hold if *h* were not the case. In non-deductive

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inferences, testing hypothesis demands evidence that *might* hold if a hypothesis were false such that if it were false, the evidence against it would hold and the evidence for it would not.[236] The truth of a hypothesis thus requires that the subjunctives or their probabilistic variants hold as true. A proposition is not evidence for some hypothesis when the proposition would hold even if the hypothesis were false; further, a proposition is not *strong* evidence for some hypothesis when if the hypothesis were false, although the evidence might not hold, it almost certainly or most probably would *hold*."[237]

4.2 Tracking Truth of Skeptic Hypotheses

Skepticism has far reaching implications for our ordinary claims to knowledge. For the skeptic we do not know ordinary beliefs; we do not know the sky is blue, or that roses are flowers, or that the Philosophy department at UoN sits on the third floor of Gandhi Wing. To cap it all, we do not know all these beliefs are true. The skeptic's razor cuts deep into truths we consider obvious; the more reason it fails to fit in our ordinary frame of experience. At the philosophical level demonstrating that the skeptic is wrong has proved pretty much difficult, as manifest in the history of epistemology. As we have analyzed above, Nozick makes a compelling case against skepticism, employing truth-tracking to demonstrate that knowledge is indeed possible.

He designs truth-tracking as the basis upon which the skeptic's claim is interrogated. He shares the same thinking with Dretske on the skeptic's argument that knowledge is closed under known logical entailment. But whereas Dretske holds that his analysis is independent of his case against skepticism, Nozick argues and endeavors to show that

truth-tracking analysis is the basis upon which his argument against skepticism is built. This way, Nozick ensures that a successful analysis of knowledge equally succeeds in demonstrating that the skeptic's Closure principle is wrong. The skeptic's Closure, we explained, holds that if a knower S knows that a proposition p is true, and also knows that p implies a further proposition q, then S must also know that q is true.

As earlier analyzed, condition (iii) only partly tracks the truth of skeptic hypotheses; it only that if it were not the case that one was dreaming, he wouldn't believe that he was dreaming. However were it actually true that one was dreaming, he would still not believe that he was dreaming. We therefore observed that with condition (iii), one's belief is only sensitive to the falsity of skeptic hypotheses (as shown in the "dream" case).

Nozick in introducing condition (iv) hopes to ensure that a knower's belief tracks the truth of skeptic hypotheses such that were it the case that one is dreaming, he would believe that he is dreaming.[238]Condition (iv) holds that if p were true, one would believe that p. Skeptic hypotheses, however, are such that if they were to hold, we would still believe they don't. We therefore cannot know that we are dreaming because even if we were dreaming we would still believe that we are not dreaming.

We equally cannot know that skeptic hypotheses do not hold for how would we come to this knowledge? How would Descartes know that he is not dreaming or that he is not being deceived by some evil genius? Both conditions (iii) and (iv) of truth-tracking

therefore fail to track the truth of skeptic hypotheses. Nozick admits that our beliefs cannot track the truth of skeptic hypotheses hence we cannot know that skeptic hypotheses do not hold. Truth-tracking doesn't work with skeptic hypotheses and hence our beliefs cannot track truth of skeptic hypotheses. The skeptic is right in holding that we cannot know that we are not dreaming.[239] Descartes then is not justified in denying that he is dreaming.

But if we cannot know that we are not dreaming, how would we know truths of empirical statements? The skeptic argues that since we cannot know that we are not dreaming, we as well cannot know the truth of empirical statements. This is because knowledge is closed under known logical entailment, i.e., if one knows that he is walking along University Way and further knows that if he is walking along University Way then he is not fast asleep in dreamland, then he knows that he is not fast asleep in dreamland. But since he cannot know that he is fast asleep in dreamland (because even if he was fast asleep in dreamland, he would still believe that he is not fast asleep in dreamland), he cannot know that he is walking along University Way.[240] No knowledge therefore is possible.

However, Nozick holds failure to track truth of skeptic hypotheses does not mean that our beliefs cannot track truth of ordinary propositions. He argues that knowledge is not closed under known logical entailment since "...the process of moving from something known to something else known to be entailed by it does not take us outside of the closed area of knowledge."[241] This means that one can still know that p even if he knows that p

implies q but doesn't know that q. One thus can know that he is walking along University Way even if he cannot know that he is not fast asleep in dreamland.

Truth-tracking as a result affirms that knowledge is not closed under known logical entailment since when S knows that p, S has true belief that p (i & ii), and S wouldn't have a false belief that p (iii) and S would have a true belief that p (iv). Conditions (iii) and (iv) are not closed under known logical entailment since a belief that p is knowledge that p only if it varies somehow with the truth of p. The varying exists due to the two subjunctive conditionals (iii) and (iv).[242]

Now, the skeptic could argue that introducing the concept of variation in analyzing knowledge is impermissible. But denying the concept of variation contradicts the skeptic's own thesis since the skeptic employs variation in his hypotheses when he states that if one were fast asleep in dreamland he would still believe he weren't, hence he cannot know that he is not fast asleep in dreamland."[243] Nozick therefore believes that it's possible to know empirical truths even if we cannot know that skeptic hypotheses don't hold. It means that despite our not knowing that we aren't dreaming, we still know that the sky is blue, or that roses are flowers, or that Philosophy department sits on the third floor of Gandhi Wing. The skeptic therefore is wrong.

4.3 Tracking Nozick's Truth: Emerging Problems

Truth-tracking expresses concurrence of our holding beliefs and the truth of the propositions believed. But how do we explain the concurrence that whenever I believe p,

it is true and untrue whenever I don't believe it? Does knowledge involve such kind of concurrence? We've observed that truth-belief correlation operates on a counterfactual dependence of belief condition on truth condition; does this dependence indeed occur out of concurrence?

Nozick believes truth-tracking caters for both necessary truths and contingent truths, and thus it expresses a unified analysis of knowledge. He thinks that it also solves the problem of misleading evidence and that it affirms that knowledge is intuitively anti-luck; that with truth-tracking, we cannot belief propositions based on misleading evidence. With the problem of misleading evidence dealt with, we cannot come to a true belief by sheer chance (like the case of Falsafa). To prove the epistemic worth of his theory, we ought to attend to some questions regarding Nozick's claims. Does Nozick solve the problem of epistemic justification? What is the epistemic basis of truth-tracking? Is the theory limited in some way? These questions are critical in addressing the problem this study address.

Duncan Pritchard has argued that truth-tracking theory is not a proper formulation of the intuition that knowledge excludes luck and thus doesn't sufficiently account for knowledge. In his counter-examples, Gettier had demonstrated that justification and knowledge somehow do not depend on coincidence or mere luck. Pritchard's thinking is that an evaluation of a theory of knowledge must be founded on this anti-luck principle;[244] an observation made by Nozick too. Pritchard in admitting that Nozick's sensitivity condition deals with Gettier counter-examples nonetheless argues it *does not*

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always accommodate the anti-luck principle. Pritchard's conception of anti-luck is counterfactual; he considers an event non-lucky if it obtains not only in the actual situation, but also in close possible situations. If an event obtains in the actual world but fails to obtain in close possible situations then it is lucky.[245]

Strictly, if knowledge is anti-luck, and truth-tracking does not always accommodate anti-luck, then truth-tracking does not account for knowledge. The theory concedes to luck; it cannot find and define knowledge sufficiently, provided Pritchard's assumptions are founded on a correct understanding of the theory. With an example from Ernest Sosa[246] Pritchard demonstrates how truth-tracking theory sometimes fails to accommodate anti-luck intuition of knowledge:

> On my way down to the elevator I release a trash bag down the chute from
> my high rise *apartment*. Presumably, I know my bag will soon be in the
> basement. But what if, having been released, it still, incredibly, were not
> to arrive there? That presumably would be because it had been snagged
> somehow in the *channel* on the way down (an incredibly rare occurrence),
> or some such happenstance.[247]

In the case above one's belief is not sensitive to truth. In the nearest possible situation in which the belief is false [the world in which by some accident, the bag is snagged in the channel on its way down] the agent would continue believing the bag is down. It thus fails to conform to conditional (iii) of truth-tracking. Intuitively, the agent *knows* that his

bag is down in the basement because the possibility that the bag does not get to the basement is quite remote hence the reason why the belief is not lucky. Since it's a rare occurrence, it isn't the case that there are very many nearby possible situations in which the bag doesn't get to the basement.[248] He posits that "...in most *situations* [worlds] like the actual *situation* [world] in which *the agent* forms his belief on the same basis as in the actual *situation* [world] his belief continues to be true."[249]

Now, does Pritchard successfully prove that truth-tracking sometimes fails to accommodate anti-luck? Can an epistemic analysis be said to account for anti-luck in some but not in all cases? Can our beliefs fail to track truth and we somehow come to have knowledge? To attend to these issues, we propose to establish the conditions of truth in truth-tracking theory, and further test whether we shall have attended to Pritchard's concerns.

But first, we argue that Pritchard's analysis invokes inductive inference, e.g., I know the bag is in the basement because it turns out that whenever I release it I always find it in the basement. Going by this, the probability the bag will land on the basement is higher than the probability it will not. In this particular case, the bag doesn't get to the basement; my belief fails to track truth since in most possible situations in which I release the bag and it snags, I still continue to believe that it is in the basement. My belief therefore violates condition (iii) of truth-tracking.

However, Nozick says that for one to have knowledge, condition (iii) must never be violated. Pritchard therefore fails to note that if the 'trash bag' case were to pass as knowledge, then a belief does not always need to be considered knowledge. It follows that provided a knower's belief fails to track truth (for whatever reason – rare occurrence included) he does not know since knowledge is treated as primarily related to truth.

A bigger problem is that of establishing truth conditions in Nozick's conditional, "if p were true, q would be true." We observed that for Nozick, the conditional "if p were true, q would be true" is true, if and only if, in every possible situation in which p is true, q would be true" (as we demonstrated in Table 1). We also observed and demonstrated in Table 2 and 3, that for Nozick, this conditional does not mean that p entails q or that it's logically impossible that p yet *not-q*. However, we did not ask the most important question: what informs the truth of this conditional? Why doesn't p entail q in the conditional? Curiously, he only tells us when this subjunctive conditional is true but does not state the conditions of truth in his analysis of the subjunctive conditional, assuming we already know what truth is.

The assumption undermines his unified analysis of knowledge since he fails to demonstrate the foundations upon which his analysis is anchored. In assuming we already know the truth conditions, he knows our beliefs can track truth; the problem however is that we don't know these conditions, and thus we cannot know truth. Logically, the idea of tracking presupposes that we already know that which is being tracked. Take the case (in Chapter One) of the hound chasing after its prey. The hound has the capacity to track

the scent of its prey hence turns in whichever direction the prey goes. This is possible because the hound can feel the scent of the prey. Likewise in truth-tracking, for us [the hound] to track truth [the prey] we need to first know the truth conditions [scent].

It follows that if we do not know the conditions of truth, we wouldn't know truth if we encountered it, or how would our beliefs track that which we do not know? Is it possible that our beliefs can track truth without the conditions of truth being known to us? We argue that it is not possible, for if it were, we would be arguing to the conclusion that our beliefs can track both truth and error. Consequently, we would not be able to distinguish truth and error for we will first have to know what truth is. We will not be "epistemically advantaged" to express truth; it means that a false belief may after all track truth and a true belief may track error. It is therefore inadequate to say that knowledge is truth-tracking without demonstrating the conditions of truth.

Without the conditions of truth, the theory runs into the problem of circularity. In holding that an agent knows if and only if his belief would be true, and [as a result] it is true if it would still be believed, the analysis succumbs to circularity and hence guilty of *petitio principii*. Why? Because knowledge derives from truth without which there is no knowledge yet the truth conditions are themselves unknown to us. It would be difficult to sustain the claim that our beliefs can track something whose conditions are unknown to us. To break this circularity, we need to give the theory an interpretation that would enable us know the truth conditions.

4.4 Material Interpretation of Truth-Tracking Theory

In establishing the truth conditions materially, we hope to enhance the explanatory power of the theory of truth-tracking. In enhancing its explanatory power we further hope to identify sufficient conditions of truth. As we observed earlier, truth-tracking is reducible to the subjunctive conditional "if p were true, q would be true" ($p\square\rightarrow q$). The conditional $p\square\rightarrow q$ is true if and only if in every possible world in which p is true, q would also be true. As we already indicated, it doesn't mean that p entails q or that it's logically impossible that p yet *not-q*.

Conditional propositions are characterized by the sentential connective "if...then", and expressed symbolically by means of horse shoe sign, or $\rightarrow$ or $>$. In conditional statements, the order in which the components [of a conditional] occur makes a difference, unlike in the case of disjunctions and conjunctions. The logical treatment of conditionals is also slightly different since conditionals differ in terms of truth-functionality.[250]

A compound proposition is truth-functional if its truth-value is determined logically by the truth-value of the simple propositions it comprises. This implies that with the knowledge of the truth-value of the simple propositions, one can derive the truth-value of the compound proposition. However, this is not obvious with conditionals since very few conditional statements are truth-functional.[251] In a conditional, the consequent follows from the antecedent logically, or by definition or causally. Logically, if all men are rational beings and Adipo is a man, then Adipo is a rational being; by definition, if a

given figure is a square then it follows it is four-sided; and finally, a consequent may • follow from the antecedent causally such that the antecedent causes the consequent to occur, e.g., if one travels to Yei then he will get yellow fever.

In all the above cases, we ought to inquire whether the proposition is truth-functional; we need to find out whether with the truth-values of the component propositions we can automatically determine the truth-values of the compound proposition itself. A conditional like "if you travel to Yei, then you will get yellow fever" has four possible scenarios in terms of the truth-value of the antecedent and the consequent. However, the task is that of establishing when the conditional is truth-functional, from the truth-values of the consequent and antecedent. First, suppose both the antecedent and the consequent are true, i.e., one goes to Yei and then gets yellow fever. Can we infer from this that the conditional is true? It is possible one may have contracted yellow fever prior to his traveling to Yei hence his getting yellow fever was not caused by his going there. This conditional is not proven true but this does not necessarily mean, via *ad ignorantiam*, that it is false. Its truth-value therefore is undetermined.

The second scenario is where the antecedent is false but the consequent is true, i.e., one doesn't go to Yei but gets yellow fever. This doesn't prove whether the compound proposition is true or false. It is insufficient to prove the conditional true since one's knowledge is limited; one doesn't know whether or not he would have still gotten yellow fever had he gone there. It as well fails to prove the conditional false because there is a

possibility that one would have gotten it had he gone there. Just like the first case, the truth-value of the conditional is undetermined.

The third scenario has the antecedent true and the consequent false. One goes to Yei but does not get yellow fever. This conditional is false since if going to Yei would cause one to get yellow fever then it *must* be the case that one contracts yellow fever if he goes Yei. Since the consequent fails to follow from the truth of the antecedent, the conditional cannot pass as true.

Finally, there is the scenario in which the antecedent is false and the consequent is false; one does not go to Yei and does not get yellow fever. It is difficult to prove the truth or falsity of this conditional for the reason that one might or might not have contracted yellow fever had he gone there. The conditional is undetermined. A conditional then is only truth-functional when the antecedent is true and the consequent is false: see Table 4 below.

P/S	p	q	$p \rightarrow q$
1	T	T	?
2	T	F	F
3	F	T	?
4	F	F	?

Table 4

Table 4 is similar to what we illustrated in Tables 2 and 3 earlier. In Tables 2 and 3 we demonstrated that Nozick's subjunctive conditional does not mean that p entails q or that it's logically impossible that p yet *not-q*. The tables indicated that in cases when p entails q or it's logically impossible that p yet *not-q*, we can only determine the truth-value of a scenario in which the antecedent is true but the consequent false (line 2).

A principle derived from this interpretation asserts that a conditional is false whenever the antecedent is true and the consequent is false.[252] Therefore, the circumstances that suffice to establish the truth-functionality of a conditional are when the antecedent is true and the consequent is false (p and *not-q*). But, as we have observed, the conditional $(p \rightarrow q)$ is false when the conjunction of p and *not-q* is true; for the conditional $(p \rightarrow q)$ to be true, the conjunction of p and *not-q* must be false; this makes the negation of the conjunction of p and *not-q* true,[253] as expressed below:

(a)   If $(p \rightarrow q) \neq (p \cdot \sim q)$ then $(p \rightarrow q) = \sim (p \cdot \sim q)$

It follows from *(a)* that $p \rightarrow q$ must have the same truth-value as $\sim (p \cdot \sim q)$ since they make the same assertion. Now, we have established that a conditional statement "if p then q" is false when the antecedent is true and the consequent is false, then the conditional holds true with the denial of the conjunction of the antecedent and negation of the consequent $\sim (p \cdot \sim q)$. For a conjunctive proposition to be true, both the conjuncts (the simple propositions) must be true. Table 5 below expresses the material interpretation of the conditional "if p then q".

p/s	p	q	$\sim q$	$p \cdot \sim q$	$\sim(p \cdot \sim q)$	$p \square\!\!\rightarrow q$
1	T	T	F	F	T	T
2	T	F	T	T	F	F
3	F	T	F·	F	T	T
4	F	F	T	F	T	T

Table 5

As demonstrated, with MI all the four conditionals are truth-functional, and all the truth-values in $\sim(p \cdot \sim q)$ and the subjunctive conditional $p \square\!\!\rightarrow q$ correspond – this is evidence that indeed $\sim(p \cdot \sim q)$ and $p \square\!\!\rightarrow q$ make the same assertion. Nozick's subjunctive conditional holds that "if p were true, q would be true" is true if and only if in every close possible world in which p were true, q would be true. However in Table 4, probability space (p/s) 1 presents a possible world in which p is true and q is also true yet the truth-value of the conditional is void. This however is different as exhibited in Table 5 (p/s 1) in which the conditional is true with the truth-values of the antecedent p and the consequent q affirmed as true. Table 5 further demonstrates that a material conditional is true whenever its antecedent is false or its consequent is true.[254]

We hold that MI is compatible with Nozick's assertion of the truth of subjunctive conditionals. The conditional "if I go to Yei then I will get yellow fever" is therefore true if, and only if, in every close possible world in which I go to Yei, I also get yellow fever. With MI, we are able to know when a belief is considered true and the conditions that determine its being true. Our beliefs thus can track truth for we now have these conditions of truth.

CHAPTER FIVE

TRUTH AND CULTURE

5.0 Introduction

The definitional problem of knowledge thrust us, right from the beginning, into the quest for conditions deemed sufficient for knowledge, having raised problems with JTB and Nozick's theory. Nozick's theory, we however acknowledged, made attempts to salvage JTB from Gettier cases. On investigating possible ways of repairing truth-tracking, we came to the conclusion that a material interpretation of Nozick's subjunctive conditionals gives us the conditions of truth we sought to track truth. In so doing, we demonstrated that establishing conditions for truth in Nozick's theory is the key to solving the problem of epistemic justification.

However, the discussion left out a concept we regard critical in analyzing truth – the concept of culture. We feel it's important to address fundamental questions with regard to the nature of truth. Is truth, for instance, a non-social concept? Are social circumstances relevant in appreciating truth? These questions derive their significance from the fact that truth is a primary condition for knowledge, and thus how it is determined is therefore critical in our quest for knowledge.

Now, philosophy has both theoretical and practical value. Philosophy as a discipline not only seeks to understand reality but also human prospects within that reality. Thus as a discipline philosophy looks for principles but philosophy must be relevant to the demands of society hence the claim that truth ought to be socially relevant. Human beings are

beings who communicate and the do so using language to pass meaning. In meaning, there is truth. Without a proper definition of truth we wouldn't be able to communicate and interact in a socially meaningful way. Defining truth then is essential for it enhances our social life. But as we shall observe, it is the definition of truth from a common pedestal that unconditions it from the subjective realm.

This chapter is an inevitable result of the preceding chapter, plunging us into further inquiry on the social criterion of establishing truth. What would become of truth if it were socially irrelevant; would it, for instance, lose its utility? We wish to attend to the variability claim on the criteria of truth; that what counts as true is itself relative to particular groups of people since truth "...*arises* out of, and *is* only intelligible in the context of, ways of living or modes of social life."[255] We therefore hope to attend to the question of how one's social life determines one's concept of truth.

5.1 On the Cultural Determination of Truth

To clearly understand the relationship between truth and culture, and how culture determines one's concept of truth, we need to commence with an attempt on the definition of culture. In making this attempt, we have a grasp of how culture is generally expressed and manifested, and how it affects our general thought patterns, beliefs and knowledge claims.

Etymologically, the term 'culture' comes from Latin terms *'cultus'*, *'cultura'*, *'colere'*, meaning 'to cultivate and care for'.[256] In this sense, culture acts as an instrument that

enhances an individual to develop and grow; it informs an individual's perception of the world from a given viewpoint. However, even with the etymological understanding, there is no sharp definition of the term accepted by scholars – philosophers, sociologists, and anthropologists. The term exhibits mixed usage in the history of thought; either as a thing in itself or as culture of a thing.[257] This shows that culture can be referred to in different senses by different people.

Generally, culture is often referred to as cumulative development of a people. Teleologically, beliefs, behaviors, values, and artifacts are regarded as developing through time toward some progressive end.[258] Edward Tylor observes that culture is "...*a complex whole which includes knowledge, belief, art, law, morals, custom, and any other capabilities and habits acquired by man as a member of society.*"[259] These beliefs, values and artifacts are inculcated in an individual by the society. The society therefore plays a major role in the formation of an individual and his existence is wholly informed by his social environment.

We then can say that culture is a process of humanization of an individual, rather than something originating from nature. This process leads to the edification of man ultimately bestowing upon him the lenses with which to view the world. Since one's culture is determined by one's social environment, an individual in the process becomes socialized. His ideals, beliefs, knowledge, values and other attributes are determined by the society in which he lives.[260] Socialization in this sense refers to "...a process in which an individual, from his infancy onward, gains knowledge and skills from other members of

the community, adapts himself to *a* concept of value and ways of...thinking, lifestyles and modes of production of his community."[261]

This process involves transforming the biological human being (through entrenching in him certain socio-cultural elements) to a cultural being. Analogically, the human mind, through this process, is programmed like a computer to respond to his 'stimuli' in some specific way. The formative process of socialization is likened to the programming of a computer. Perhaps it is this influence of culture upon man that triggered the French philosopher Jean Jacques Rousseau in asserting that "man is born free, but everywhere in chains".[262] This is because in undergoing socialization, man is conditioned on how to conduct himself in the society.

The relevance of philosophy in analyzing culture is amplified in Wiredu's *Philosophy and an African Culture* in which he believes that the link between philosophy and culture is more than symbiotic. Philosophy plays the role of analyzing, justifying, rejecting or modifying cultural values and practices.[263] He demonstrates this by citing three problems that afflict society, namely anachronism, supernaturalism and authoritarianism. An achronistic individual is one who fails to recognize the uselessness of an idea thus continuing to hold unto it. For instance, wife inheritance was a social value appreciated by many among the Luo community of Kenya, but that is not the case today. One who fails to recognize this is said to be anachronistic.

Authoritarianism extols age as authority to the detriment of expertise when it comes to critical decision-making; the elderly must therefore be obeyed irrespective of one's knowledge and capability. Finally, supernaturalism is the tendency to believe in supernatural explanation of human events; the explanation is characterized by magic and mysticism.[264] These practices undermine the development of a people because they are basically retrogressive and rearward. To reverse this, we must engage in rational questioning of these issues and it is possible only if we adopt the critical and analytic method of philosophy.

Okot p'Bitek equally emphasizes on the relevance of philosophy in analyzing culture by arguing that philosophy and culture are one and the same thing. He defines culture in terms of philosophy; that it [culture] is "philosophy as lived and celebrated".[265] The idea that culture is distinguishable from a people's way of life therefore is something alien to African thought. Okot's concern is justified since a people's way of life is informed by their culture, and since culture is philosophy in practice, it is the expression of a people's values and beliefs that collectively make them unique. These values and beliefs must not be interpreted as mere commodities for it is inaccurate to view culture in that light. A people's way of life is inseparable from the people themselves.

It's therefore accurate to avow that one's way of life is largely defined by his culture for he is a cultural animal. He adopts a particular way of behavior founded upon a concept of value his society inculcates in him.[266] Every culture 'packages' its people differently. In this regard, culture is socially transmitted, and one's society plays a major role of

instilling certain values in the individual.[267] Culture and society are therefore related. Society imbues one with a way of interpreting reality since "*every* social community has its own culture...*that* its members share in common."[268]

The argument that society defines our understanding of truth is evident in a number of philosophical movements, for instance, in Marxism. Karl Marx proposes a material interpretation of human existence and development, preferring – against Hegelianism, that to achieve truth we must first appreciate society as the sole determinant of the relation among men. Marx suggests that "...material life conditions the general process of social, political and intellectual life *and* it is not the consciousness of men [concepts/thoughts] that determines their existence, but *rather* their social existence that determines their consciousness [way of thinking]."[269] Building on Marx's argument, every society has its peculiarities, and these peculiarities eventually determine the way the individual thinks and how he forms concepts of the world and human existence.

The notion of culture therefore is significant in interpreting human life and man's attempts to understand reality.[270] Yet the school of analytic philosophy, in concentrating on investigating language and concepts, neglected the role of culture in philosophical analyses, at least in developing a solution to epistemic justification. We think differently; for us, culture is a tool of analysis – a way of making sense of the world. Culture informs a people's *weltanschauung*, and it is always traceable to certain foundational principles guiding a people's life.

Philosophy endeavors to establish a connection between man, nature and the society in which he lives, from the viewpoint of human existence and advancement.[271] The theoretical value of philosophy thus is transformed into some practical consumption for man. Now, if every culture has its own way of interpreting reality, it means that no culture is superior to any other culture. This thinking is espoused by cultural relativists. For cultural relativism, we ought not to append superiority status to any culture in comparing its systems of law, morality and politics to that of any other culture. The validity of beliefs of any culture thus is dependent upon the cultural identity of the individual.[272]

The implication of this argument is that there is no objective standard usable in judging one societal code better than another, hence there is no universal truth that holds for all people at all times. Cognitive relativism derives from this, asserting that truth lacks an objective universal status.[273] The claims by cognitive relativists, as we shall observe, draw great debate as to the nature of truth. We delve into the possibility that truth is relative and whether it means that there are no truths that cut across cultures. We also take into consideration the possibility of truth being one and absolute and whether it is possible to come to know absolute truth.

Now, we have said that cognitive relativism stems from the claims by cultural relativists. It's vital to note that cultural relativism was instrumental in the development of philosophy in Africa as it acted as the foundation-stone of pluralism, a movement considered to have triggered great debate on African culture vis-à-vis Western culture.

Proponents of pluralism held that all cultures are commendable in their own right and thus are equal in value. It was therefore wrong to argue that Western culture was superior because of great technical advancement it exhibited while African culture was inferior due to lack of technical development.[274]

Pluralists basically are saying that all cultures ought to be considered as equal and legitimate expressions of human existence. Since truth is not objective, there is no yardstick for testing the validity of cultural beliefs against other cultural beliefs. From this, we can deduce that truth is socially or culturally determined. Pluralism, we argue, says something fundamental about truth and how we come to hold certain claims. We acknowledge that the community in which an individual is raised influences his general understanding of concepts. Nevertheless, we think that values can be shared across cultures hence it may not necessarily be the case that all the claims of cultural subjectivism are true.

Now, cognitive relativism is central to the idea that truth is socially determined. Social determination of truth is exhibited in nearly all, if not all cultures; from the non-technical cultures to the technically advanced cultures marked by great scientific development. Cognitive relativism demonstrates that the criteria by which we verify certain claims include, among other things, custom, tradition and authority; all of which are essentially social in nature. But it's very rare that custom and tradition hold as reliable avenues for evaluating the truth of a belief.[275] By custom, we mean that which is common in society,

regardless of whether it is of ancient origin or not; while tradition refers to something that has stood the test of time.

The unreliability of custom and tradition in determining the truth of a belief is exhibited in most beliefs different societies held and probably still hold as true even though logic affirms the very opposite. Authority in some cases acts as a criterion for truth – especially when one has expertise in the area of knowledge under scrutiny and other experts agree with the opinion of the expert who proposes the theory. Such an agreement buttresses the expert's argument accordingly justifying his claims as true.[276] Science, some have argued, develops like this, thus invoking the idea of truth as a social construct.

Thomas Kuhn, for instance, thinks that development of scientific enterprise is dependent on agreement among a particular community of scientists. In *The Structure of Scientific Revolutions* Kuhn develops an analysis of the most fundamental concept in his philosophy: paradigm. He traces the growth of science from prescience stage characterized by disorganized activity preceding normal science, the latter of which is guided by an established paradigm. Normal science nonetheless fails to sufficiently attend to anomalies and crises that arise to undermine scientific growth.[277]

Such crises impel scientists to question the assumptions of the paradigm in place. If the crises persist beyond the ability of the given paradigm, then that paradigm is replaced by a new paradigm in what Kuhn calls a revolution.[278] Such shifts in paradigm are evident in the history of science; for instance in astronomy, the change from the earth-centered

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theory of Ptolemy to the sun-centered theory of Copernicus; in physics, the change from Newton's theory that space and time are absolute, to Einstein's theory of relativity.[279]

Science then does not grow via a linear accretion of knowledge but rather undergoes sporadic changes which result in the abrupt transformation of the nature of scientific inquiry.[280] The factors that lead to this growth are to be found beyond logic and empiricism; these factors are enshrined in a paradigm. To understand this growth, one must therefore understand what a paradigm is, how it fits in the entire process of scientific growth and what determines the paradigm. Kuhn defines a paradigm as "an accepted model or pattern."[281]

A paradigm is not a mere hypothesis but rather a way of looking at the world. It is a worldview influenced by both cultural prejudice and scientific observations of the time.[282] A paradigm is shaped by socio-political and historical institutions of the scientist's community. Societal values shape a paradigm in the sense that a society, depending on its needs, may exhibit more interest in studies being carried out on, say, a cure for HIV/AIDS and not Parkinson's disease.[283]

Kuhn's argument that the choice between paradigms "...is not and cannot be determined merely by the evaluative procedures characteristic of normal science..." is fittingly relevant in our analysis of the social determination of truth. In likening a paradigm choice to political revolution [in the sense that both derive highest assent only from the relevant community],[284] he shows that paradigm choice demands more than the dictates of logic

and experiment. Such a choice is determined by the conscious agreement among a community of scientists.

The implication of Kuhn's assertion is that all truth is limited, approximate and evolving all the time, and we can never have an absolute truth explaining all things – or simply, reality. Since a paradigm shift is determined socially, truth too is socially determined since the shift is geared toward achieving truth.[285] As a social construct, truth is subjective rather than universal, a view grounded in cognitive relativism. Kuhn's understanding of absolute as that truth that accounts for all things, as we shall observe, is incompatible with what we think of absolute truth, i.e., a universal truth that caters for a given aspect of reality but not all reality. It is a truth that is asserted and holds universally.

The idea that different cultures have different truths implies a vague understanding of the term 'truth'. This understanding refers to the less substantial concept of belief constricted by the regime of culture. However, it is difficult rejecting the idea that truth is something that is universally acceptable; something that transcends the limiting hegemonies of social differences. A universal notion of truth points to the fact that there are certain values that are transcultural thus appreciated across the entire moral universe.[286] Objectivism is built upon this; that truth holds everywhere even if our perception of it is hindered by the cultural lenses with which we see it. But this debate is compounded by the difficult questions raised against both subjectivism and objectivism.

The debate on the nature of truth is manifest in African philosophy, conveying great endeavor to discover what truth is, how it relates to culture, and its practical relevance in our man's pursuit to understand the world. Significant here is the discussion between the late Professor Odera Oruka of the Nairobi School and the Ghanaian Professor, Kwasi Wiredu. Whereas the former advances what he calls a neutral theory of truth[287], the latter affirms a subjectivist theory of truth.[288]

5.2 Philosophy in Search of Absolute Truth

Philosophy, by virtue of its nature, stands a cut above other disciplines when it comes to rigorous investigation into the nature of reality. Such investigations usually are informed by the attitude that there exists some truth that holds as an explanation of reality. That a given aspect of reality can be explained by a single truth is testament there exists an absolute truth. The idea of absolute truth however is not entirely welcome among philosophers, with those opposed to it arguing that the criterion by which to determine absolute truth is not easily demonstrable.[289] We think this argument is defective since it assails the *ad ignorantiam* fallacy – that the lack of a criterion by which to determine absolute truth is itself evidence that there is indeed no absolute truth. This however points to the deeper problem of whether we can ever know absolute truth.

Wiredu, in holding that we ordinarily know some propositions to be true, defines truth as nothing but an opinion[290]and in the process develops an analysis of truth that runs against the traditional truth-belief dichotomy. Plato had distinguished truth from opinion/belief arguing that whereas the latter is fallible, the former is infallible and absolute. He held

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that opinion is bound to change from time to time but truth is eternal thus unchanging. It's for this reason he regarded truth as independent of, and categorically different from opinion.[291] As Wiredu explains, two objects are categorically different from each other "...if something which when said of one of them is either true or false becomes, when said of the other, neither true nor false but *rather* inappropriate or meaningless."[292]

In defining truth in terms of opinion, Wiredu differs with the objectivist claim that truth and opinion are categorically different. We explore his theory to understand the foundational assumptions upon which it is premised; and this exploration involves, among other things, inquiring whether his theory is logically sustainable. In the ordinary sense, opinion is mere belief filled with doubt and insecurity. Against ordinary usage of the term, Wiredu defines an opinion as a firm rather than an uncertain thought; firm opinion being a secure thought advanced from some given point of view.[293] He uses the term [firm opinion] in a specific way to mean a considered belief – a factual statement rather than an attitude to situations. In this sense it is a judgment defined by certitude borne out of rational effort since it is informed by certain given evidence.[294]

Wiredu grounds his theory on the relevance of "point of view" in the concept of truth value. The concept of truth-value is here taken to consist in pointing out conformity of a given point of view with another. For him then, truth is a first person concept since judgment is analyzed from a particular point of view.[295] He holds that what constitutes firmness of thought is the fact that one certainly believes his position is true from his point of view. This informs his thinking that the concept of point of view is intrinsic to

that of truth, and thus he considers truth "...necessarily joined to point of view, or better, *it* [truth] is a view from some point, and *therefore* there are as many truths as there are points of view."[296]

Now, an objector may argue that if indeed there are as many truths as there are points of view, then two mutually contradictory propositions must both be true, yet of the two only one can be true. Wiredu's thesis, the objector may conclude, defies the metaphysical principle of non-contradiction. Wiredu however thinks that "...a contradiction arises only when two mutually inconsistent propositions are asserted from one and the same point of view."[297] For instance, if the statement "Adipo is tall" is held true from one point of view and a second statement "Adipo is not tall" is held true from another point of view, a contradiction only arises if a third point of view holds both propositions true.

Now, since truth is dependent upon an individual point of view, there is always an element of subjectivity in truth. Wiredu, however, is quick to point out that his analysis does not mean that every instance of belief is an instance of truth. He only identifies truth with opinion and considers his theory a normative step toward accepting that we may sometimes err in our quest for truth. Such fallibility is evident in the history and development of science as earlier observed in Kuhn's concept of paradigm. That we sometimes err is a depiction of the human character of truth. Wiredu therefore lays emphasis on human character of truth, arguing that for humanities to become entirely humane, they must be instilled with this human character of truth.[298]

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Despite seeming to liberate us from the absolutist and dogmatic approach to the problem of truth, Wiredu's thesis raises questions in hinging the concept [of truth] on "point of view" as evidenced in Oruka's *Practical Philosophy: In Search of an Ethical Minimum.* Oruka thinks that Wiredu is wrong in stating that our ordinary experience demonstrates we sometimes *know* some statements to be true. Actually it is the case that we sometimes, if not most times, *believe* that we know [even if we don't].[299]

Knowledge, we had observed in Chapter Two, cannot involve error but belief can. Even if a belief is embraced with every ounce of certitude and firmness, it still remains a belief, *and just that!* Ancient Egyptians, Greeks and Sumerians believed and were certain that the Earth was flat, but they were wrong.[300] The pre-Copernican scholars firmly believed the universe was geocentric, even burning at the stake those who dared oppose that belief, but it turned out that they were wrong.[301] Many beliefs among different African and non-African cultures that were regarded as true turned out to be false despite the fervor with which they were held. These were not cases of knowledge or truth; they were only cases of [firm] belief. Knowledge therefore cannot be the same as belief or opinion.

This does not imply that knowledge does not entail belief. For any true statement to be known as true, it must first be asserted from some specific point of view. However, it is inaccurate to infer from this that to be true is to be opined to be true.[302] Even though knowledge entails belief, it demands more than just that. An opinion then is just an opinion, regardless of the point of view from which it is given. If truth is nothing but opinion as Wiredu says, then it means that truth is exclusively determined by an

individual's beliefs. Subscribing to Wiredu's opinion has the risk of leading us into the difficulties of internalist theses that we discussed in the preceding chapters.

Oruka develops a neutral theory of truth. For him, truth is neither radically different from belief nor is it identical with belief. If truth were radically different from belief, then just as Wiredu observes, it would be inexpressible; but if it were identical with belief then no belief would be said to be false.[303] Oruka appreciates the idea of absolute truth but thinks that human development has not come of age to know absolute truth or even determine how to know it. Since we are yet to identify a criterion by which to determine absolute truth, we need to limit ourselves to contextual truths – those that we can actually know. A truth-claim then is only meaningful in a criterion even though it doesn't follow that there are as many truths as there are contexts. He ties contexts to certain criteria which a proposition must fulfill to be true.[304]

Oruka is not particular with a single criterion that a proposition must fulfill and thus does not limit us to a specific one. The criterion could be some self-evident premise upon which other premises are derived, or it could be "...a moral norm, a scientific law, a necessary truth, a prophet's postulate, some consensus opinion or will of a military dictator."[305] This implies that there is more than just one truth and the criterion used makes some truths more universal, eternal and objective than others. Those truths whose criteria are more scientific and universal usually override those whose criteria are less universal.[306]

We argue that these criteria basically demonstrate those beliefs taken as true but which may not necessarily be true. Oruka himself dismisses some of these criteria like that of the "will of a military dictator." The dictator firmly believes his is a just rule and that he is the best leader his nation can ever have. He is the symbol of truth as evidenced in the spirit of his die-hard followers. But what informs the will of a military dictator, and toward which common good does it move? A military dictator is driven by self-interest and hardly has a genuine love for the common good. The will of a dictator barely stands for the beliefs of a people, leave alone the truth. The recent Arab uprisings in North Africa and Asia clearly corroborate this.

Nyayo philosophy [in the loose sense of the term] of president Moi was taken as the truth by people who believed his regime demonstrated socio-economic and political development in Kenya. But that philosophy only drove the country into retrogression characterized by death of free press, human rights abuse, tribalism, impunity and grand corruption. Nyayo philosophy was nothing but a belief – and a false one, held firmly by a clique of leaders buoyed by support from die-hard disciples. In fact, those who fought for second liberation of Kenya considered Nyayoism a pseudo-philosophy. We therefore agree with Oruka that the will of a military dictator may therefore not necessarily deliver truth after all.

Now, where does this leave us with the question of truth and society? Does truth become irrelevant at some point? Does it 'tear away' into mere belief? Do these beliefs, true or false, have a social function? We argue that beliefs have certain functions in the society;

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in fact social demands of a community operate at the level of beliefs. Beliefs are conventional. But with time beliefs become irrelevant even though truth itself is not and can never be irrelevant. It seems that people in most cases confuse beliefs with truth; this infuses impetus to the search for truth. We are always seeking it, hoping that we come to grasp it.

It is significant to question the possibility of coming to grasp absolute truth. By absolute truth, it is meant truth that is universal. We argue that absolute truth in the sense that it is universal and objective is representational of actual reality hence does actually exist. This is because there actually exist standards that delineate what is true and what is not. If there was no absolute truth, physical laws like that of gravity would be totally irrelevant. Further, absolute truth is a logical necessity in the sense that it would be difficult arguing against its existence since such an argument expresses a truth which the objector holds as absolute in its very self.

However, it is not meant that there exists one truth that explains reality in its entirety. Such truth is not conceptually possible; for it to be possible, we must first foresee a time when we arrive at knowledge of everything that is. But we cannot envision the end of knowledge because it's humanly impossible. To arrive at such truth would require that we have cognitive perfection, we must eliminate the possibility of error; yet, as human beings, we are fallible. To come to full understanding of every aspect of reality, we must first exhaust reality but it is impossible to exhaust all attributes of reality since this would require perfection of the mind of which we lack.

CHAPTER SIX

CONCLUSION, FINDINGS AND RECOMMENDATIONS

6.0 Conclusion

In this research, we set out to address and examine the problem of epistemic justification, with particular interest in Robert Nozick's theory of truth-tracking. We investigated the limitations of the traditional analysis of knowledge according to which knowledge is justified true belief. That despite stating truth and belief as necessary for knowledge, JTB may still accommodate true beliefs acquired out of luck hence removing the element of truth as fundamental in defining knowledge. We then showed the significance and relevance of Gettier's critique of JTB in developing a sufficient analysis of knowledge.

It was observed that internalist attempts toward a solution of the definitional problem were insufficient mainly because the theories are limited to the epistemic subject; yet knowledge is a process involving both the subject and the object. We further observed that externalist causal analyses of knowledge, regardless of transcending the subjective realm, were found to be vulnerable to Gettier-type cases besides proving too strict to account for knowledge.

We opted to attempt the problem by interrogating Nozick's counterfactual analysis of truth, which, as we argued, had the key to solving the definitional problem of knowledge. To affirm this, we evaluated the epistemic basis of the theory; investigating its limits and examining its effectiveness. Based on our findings we endeavored to demonstrate the

possibility of enhancing the explanatory power of truth-tracking theory to account for epistemic justification.

However, we observed that truth-tracking theory of knowledge, despite addressing the difficulties faced by both internalist and causal analyses of knowledge, does not avail to us the conditions of truth to enable its tracking. Consequently, we observed that the tracking conditions are at the risk of tracking error since without the conditions of truth, we wouldn't know what truth itself is if we encountered it. To salvage truth-tracking theory we proposed a material interpretation of the tracking conditions and proceeded to demonstrate that such an interpretation makes known the truth-conditions upon which Nozick develops his theory. We then observed that these truth-conditions in truth-tracking are what lays the distinction between Nozick's theory and other externalist theories, both causal and counterfactual.

We have demonstrated the primacy of truth in the analysis of knowledge by affirming that knowledge is related to truth such that without truth we cannot claim to know. Knowledge as a process of truth-tracking demands that we know what it is to say that a proposition is true for it is only then that we would be able to recognize truth if we came across it. It is however important to note that this study was an appraisal of Nozick's theory, and to this extent we interpreted the tracking conditions on the assumption that truth itself exists. We therefore did not attend to the question as to how to confirm the existence of truth, or how to explain it. Truth-tracking is founded on the assumption that the existence of truth is already confirmed and that the truth conditions for tracking are

also available, we argue that it is important to make an attempt [which was not made here] to formulate a truth-confirming theory to establish the very existence of truth.

In confronting our definitional problem of knowledge and the significance of truth, we observed that Western analytic philosophy has not appreciated the role of culture as a tool for analyzing truth. At this point we felt it was necessary to investigate the question of truth and culture, and by extension the question of epistemic subjectivism and objectivism. We realized that due to social and cultural factors determining an individual's conception of truth, it is difficult to totally reject the idea that truth is subjective. Founded on this observation, it was agreeable that there are more than just one truth. Yet we felt this challenged the idea of truth as absolute and universal, beyond cultural differences.

We thought that despite lack of a clear criterion by which to apprehend absolute truth, such truth cannot be said to be non-existent. It is the ultimate truth toward which man strives; the *telos* that pulls us toward itself. Even though we may not be able to acquire it today, it is left upon future philosophers to fulfill the promise of truth made by their predecessors.

6.1 Findings

In this study, we made the following findings.

1. That, without known truth conditions for tracking, Nozick's truth-tracking theory fails to meet the demands of epistemic justification since we wouldn't have indicators of that which is being tracked.

2. That, a material interpretation of the truth-tracking theory makes known the truth conditions of the theory thus enabling the possibility for one to track truth.

3. That, since knowledge is a subject-object relation expressed in form of true propositions, for an analysis of knowledge to meet the demands of epistemic justification it must be built upon the primacy of truth as the condition from which knowledge derives.

4. That, epistemology involves both descriptive and normative methods as it addresses not only problems of belief formation but also problems of distinguishing between truth and falsity. Epistemological problems can be addressed by employing methods in psychology and also in logic.

5. That, culture plays a significant role in determining our concept of truth.

6.2 Recommendations

From this study, we recommend that further research should note that,

1. Since Nozick formulates his theory on the assumption that there is truth, he fails to demonstrate the basis of his assumption that there exists truth. In our study, we only sought an interpretation of truth-tracking theory to enable us track truth, equally assuming that indeed there exists truth and that its existence can be

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asserted. However, we think that it is of great importance to investigate and establish the very conditions of the existence of truth without starting from the assumption of its existence.

2. Following the above, future researchers should make an attempt to formulate a truth-confirming theory before even tracking it since we ought to confirm truth in order to track it.

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