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A critique of the traditional and the post-gettier theories of justification: an intervention with epistemological functionalism

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Abstract

In their quest to refute the sceptics' challenge to the possibility of knowledge, epistemologists have over the years strived to demonstrate how our beliefs can be appropriately justified. This paper critically examines two of these traditional or anti-sceptical theories of justification, namely: Foundationalism and Coherentism, as well as three famous post-Gettier theories of justification: Reliability, Defeasibility and Causal theories. Notwithstanding their relevant contributions in clarifying the conditions for the justification of knowledge, the paper argues that none of these theories attains the requirements of rational success without vulnerability to the sceptics' challenge, since each is nettled with some identified epistemic defects, especially due to their emphasis on a single and fixed idea of rational justification – with preference for formal adequacy over functional efficacy of knowledge claim in human inquiry. As a way forward, the paper argues for epistemic justification in a functionalistic framework and concludes with the positive recommendation of this perspective as a more viable alternative approach to epistemic justification. The expository and critical methods of philosophical analysis are adopted in the work.

Keywords: Scepticism; Foundationalism; Coherentism; Reliability; Defeasibility; Causal

1. Introduction

Essentially, where scepticism asserts the contrary, epistemology tries to show how we can acquire knowledge with certainty. Hence, one of chief concerns of epistemology is to determine how to refute scepticism, and to show "how human beings perceive the world and gain knowledge about it" (Etuk and Archibong, 61). According to Peter Klein, "much of epistemology has arisen either in defense of, or in opposition to various forms of scepticism" (I). Therefore, the question of how any knowledge is possible at all fuels the motor of epistemology history and keeps it producing theories of knowledge and justification of knowledge (Burr and Milton, 443). To countervail the sceptics of his time and to defend the possibility of knowledge Plato in his *Theaetetus* in seeking to distinguish knowledge from opinion, conceived knowledge as "a true belief, equipped with a suitable rationale" (201c-210d). Over the years, epistemologists have sought to characterize knowledge in line with this Platonic conception, which "sets tripartite conditions for the attribution of knowledge, namely: Belief, Truth and Justification" (Etuk, 10). The message here is that, to know a proposition, one must believe it; it must be true; and it must be held to be true on rational grounds sufficient to guarantee its truth. In other words, knowledge involves a true belief that is appropriately justified.

In their quest for the flawless grounds for the justification of knowledge, epistemologists have over the years strived to demonstrate how our beliefs can be appropriately justified with their anti-sceptical theories of knowledge justification. This paper critically examines two of these traditional theories within the framework of the traditional account of knowledge as "justified true belief" (JTB), namely are: Foundationalism and Coherentism. However, in his 1963 Paper, "Is Justified True Belief Knowledge?", Edmund Gettier questioned the adequacy of the three conditions in the traditional

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account of knowledge. He raised some counterexamples to pass on the message that "justification is not always reliable as a criterion for knowledge because of the possibility of being mistaken about what we think we know" (Etuk, 11). Our knowledge must therefore be based on proper precondition for it to be certain enough, otherwise, it would always be vulnerable to the sceptics' challenge.

The course of epistemological discourse in recent times has witnessed a significant attention devoted to this Gettier problem, to secure the fourth condition for knowledge that can sufficiently address the issue of justification and overcome the sceptics' challenge. This paper also takes a critical look at three of the notable post-Gettier theories of justification, namely: the Reliability, the Defeasibility, and the Causal theories. Given their identified epistemic weaknesses and their inability to adequately address the sceptics' challenge, the paper advocates for epistemological functionalism as a more viable alternative theory in this regard.

2. The Role and Nature of Justification

Given the currency of emphasis on justification, it has become more appropriate these days to describe epistemology as "a theory of justification" (Ukpokolo, 98). Justification in epistemology is the grounds for holding a belief or knowledge-claim. Epistemologists agree that knowledge is not simply a matter of having a true belief that is *somehow* justified, but rather that "knowledge calls for having a true belief that is *appropriately* justified" (Rescher, 5). The basic idea of justification is that, to count as knowledge, a belief must be *justifiedly* held in that the belief's rational is flawless. There can be no problem in crediting *p* with knowledge of *y* if: *p* believes *y* on grounds sufficient to guarantee its truth and realizes this to be the case. In this case, a belief held based on falsehood, conjecture, luck, assumption, or coincidence, can hardly count as knowledge, for these cannot count as appropriate reasons adequate enough to justify it.

Justification here, is to be construed in a complex two-sided way because, not only that the belief must be accepted by the believer on grounds that he deems adequate, these grounds must be such that *we* the (the attributers of the belief) endorse by also deeming them as equally adequate. This point is emphasized by Rescher thus: "The 'subjective' justification of the attribute must satisfy the 'objective' justification of the attributor if an attribution of knowledge is to be viable" (6). With this in mind, Alvin Plantinga says that a belief is justified if and only if the subject holding such is "right to belief it or the subject has justified his intellectual duties" (30).

However, fulfilling such intellectual duties often becomes quite a difficult exercise to undertake adequately. The difficulty is that the grounds on which our beliefs are held, in many cases, often prove insufficient to adequately justify our knowledge-claim. Spurred especially by the awareness of this difficulty associated with the nature of justification in our knowledge claims – which ultimately reveal many ways our knowledge can go wrong on account of want of certainty, the sceptics question the very possibility of knowledge.

3. Philosophical Scepticism

The philosophical school of scepticism doubts the possibility of certain knowledge or truth (Kreeft, 367). For the sceptics, there is always a problem with the nature of our perception, because the data at our disposal does not always exhaust the contents of our objective claims. For this reason, there is always "an evidential gap between the evidence in hand and the substantial contention at issue, which foredooms any prospect of attaining certainty in knowledge" (Rescher, 38). Thus, the sceptics argue that mere belief in something does not necessarily justify an assertion of knowledge of it. In this regard, the sceptics are opposed to dogmatism in epistemology, and maintain that everything is open to doubt and so requires credible and adequate grounds of justification, if they are to be accepted as knowledge.

Accordingly, factual claims such as, "The apple is red", as different from the subjective claim, "The apple appears red to me", are invariably such that there is a wide gap between the evidence we need to have at our disposal to make such claim warrantedly and the contents of this claim. Hence, for the fact that all our statements regarding matters of objective facts are such that the contents of the claim move beyond the evidence for it that is actually at our disposal, the sceptics maintain that there can be no knowledge, since there can be no certainty about our factual knowledge claims. Stated otherwise, all our knowledge claims are "appearances" since the definitive condition of certainty cannot be met in the factual domain due to our human *vulnerability to error*.

To bolster their claim to the impossibility of human knowledge, sceptics often generally, present other knowledge-defeating possibility: the supposition that *life is but a dream,* or the hypothesis of the Cartesian arch-deceiver – "which can be subjectively indistinguishable from those we take to be appropriate for acquiring knowledge, but which are not so" (Burr, John and Milton Goldinger, 464). Here, the unattainability of any knowledge in matters of objective fact is

supported by the sceptics based on the impossibility of ruling out such certainty defeating possibilities as dream, delusion, illusion or hallucination. Sometimes one who experiences one or other of these states does not know that one is doing so and takes oneself to be having veridical experience. But although, one thinks one is in a state which lends itself to one being justified in claiming to know a given thing, one is actually not. In such a case, one does not know what one claims to know. Hence, for anyone to claim any knowledge of anything, he must be able to exclude the possibility that, he is not subject to such states as dream, delusion, illusion or hallucination.

Moreover, the sceptics often adopt the *regress* argument to show the impossibility of knowledge demonstrating how impossible it is to firmly justify our beliefs. Accordingly, every belief requires justification to support it. However, any justification also needs to be justified itself. If this is the case, the chain of justification must go on *ad infinitum* (to infinity); meaning that, nothing in the chain could ever be justified. The argument may be represented thus: Given some belief *p,* it appears reasonable to ask for a justification for *p.* if that justification takes the form of another statement *y,* one can again reasonably ask for a justification for *y,* and so on and so forth infinitely. For this reason, knowledge is impossible since nothing in the chain can get justified. However, as a way of attempting to defeat these defeaters to knowledge claim, epistemologists have advanced several anti-sceptical arguments, generally considered as theories of justification, five of which listed above shall be here examined.

Historically, scepticism in western philosophy, traces to Pyrrho of Elis (360 B.C – 270 B.C), who sought after ways to become happy and tranquil (*ataraxia*) from the different opposing schools of thought of his day. Believing that in matters of knowledge, certainly must elude us, and that equal arguments can be offered on both sides of any proposition, Pyrrho dismisses the search for truth as a vain endeavour" (qtd. in Stough, 19); arguing instead that, "one should suspend judgments altogether, for only thus will the important goal of achieving *ataraxia* (peace of mind) be realized" (qtd. in Burr, John and Milton Goldinger, 463). However, for Arcesilaus (315-241 B.C) and Carneades (213-129 B.C.), though certainty must elude us, it is not practically possible to suspend judgments as Pyrrh recommends; rather, we should accept whatever proposition or theory that is "more probable" than its competitors.

At a later time, Sextus Empiricus (c. 200 B.C.), perhaps, the most systematic and dogmatic sceptic, notes the following modes of scepticism, among others in his book: *Outlines for Scepticism*, that: One may be sceptical of the *subjective perceiver* – since both the power of the senses and reason may vary among different people, and since knowledge is a product of one or the other, and since neither are reliable – knowledge would be in trouble. Secondly, one could be sceptical of the *objective world* – "the personality of the individual may have an impact on what he observes" (Empiricus, 56). Thirdly, one could be sceptical about the *relation between the perceiver and the world* – our senses may disagree over what we perceive and are generally unreliable to perceive things as they are objectively. Hence, one may have reason to doubt that what we perceive with the senses are true, or that they are based on the relationship between objective fact and subjective experience.

In the later part of the Renaissance and the Modern periods, with religious certainties under attack and new ideas abroad, some of the skeptical considerations discussed by the Pyrrhonians and Empiricus acquired a special significance, most notably in the works of Rene Descartes (1596-1650). They proved useful as tools in the highly consequential matter of investigating the nature of knowledge and the proper means of getting it. Descartes, for instance in his *Meditations*, sought to establish the grounds for certainty in knowledge by adopting some of the traditional sceptical arguments. He resolves to doubt everything he had previously believed and to accept only those truths, which appear to him to be "clear and distinct"'; for it is possible, he suggests "to imagine that one's entire walking life is an illusion" (144).

Also, David Hume, the most consistent empiricist in the modern period doubts the reality of the self (ego) and the principle of causality (Nnoruka, 38). Hume categorically maintains that what we call self is, "nothing but a bundle of collections of different perceptions which succeed each other with an inconceivable rapidity and are in perpetual flux and movement" (Hume, 252 – 253). He considers the idea of causality as a psychological phenomenon arising from our habit of associating certain objects or event with each other, which we often see together. Obviously, the sceptics' challenge saves us from philosophical and scientific dogmatism by calling to question the very possibility of knowledge and the need to prove any such knowledge-claim with adequate justification. Inspired by this sceptics' challenge, epistemologists have over the years strived to demonstrate how our beliefs can be appropriately justified or how justification can be adequately supplemented for there to be true and certain knowledge. This is demonstrated in the following anti-sceptical theories of justification we now examine.

4. Foundationalism

Foundationalism is an epistemic theory of knowledge justification meant to refute the sceptics' challenge to the possibility of knowledge, and to show how knowledge can be justifiedly held. Foundationalism principally rejects the sceptics' *infinite regress* argument and seeks to show that "knowledge has foundations in certain *basic* and *foundational* beliefs, which are incorrigibly self-justified and can provide the firm foundation for the justification of other beliefs" (Pollock and Joseph, 32). Foundationalism favours "a linear approach to the justification of knowledge" (Etuk, *Plantinga's Reforemed Epistemology…*, 2254), and against the sceptics' *infinite regress* argument maintains that, the series or chain of justification must terminate with certain beliefs which are properly basic, self-evident and self-justified – since they do not need to be justified by other beliefs – but "constitute the foundational structure on which the whole super-structure of justified beliefs rests" (Haack, 14). According to Simon Blackburn, such beliefs provide the secure foundation of certainty on which the edifice of knowledge can be properly built (139). Foundationalism has a long history, deeply rooted throughout the western philosophical tradition from Aristotle, though Descartes to the present day.

Often, the mental states (reason) and the immediate experience (sensation) are taken as good basis for the proper basicality, self-evidence and self-justified nature of the basic beliefs; for, accordingly, beliefs on the basis of these – rational intuition or sense perception – do not need further support or justification. For instance, Descartes' Cogito ergo sum "(I think therefore I exist), is believed to be such a rationally certain or intuitive experience which cannot be doubted, but which serves as the basic belief for his knowledge construction. Again, for Foundationalist like Roderick Chisholm, indubitable certainties in knowledge can be found in the first-person propositions about one's experience, which are "self-presenting properties" (45). That is, as one undergoes an experience and eventually reflects upon it, the proposition that one is experiencing in a specific way is certain and indubitable for one. Chisholm illustrates this thus: "If S belief that he perceives something to have a certain property *F*, the proposition that he does perceives something to be *F*, as well as the proposition that there is *F*, is one that is reasonable for S" (45). That there is really such an object like *F*, which S seem to perceive in the external world, is a conclusion to be arrived at later by means of necessary inferences about the external world justified on the basis of this self-justifying subjective self-experience.

However, although foundations appear quite essential for knowledge justification – at least to end the *infinite regress* – Foundationalism is subject to certain epistemic deficits which render it vulnerable to the sceptics' challenge. Primarily, the arbitrariness surrounding the idea of the foundationalists' claim of basic or foundational beliefs – which are self-evident and self-justified and can give justificatory support to other non-basic inferential beliefs in the series – readily give this theory away. The question is: Why should the series end arbitrarily with the so-called basic belief? Such gratuitous assumption can hardly be justified and cannot address the sceptics' challenge.

Besides, given the reality of the human cognitive imperfection, it is by no means likely the case that there are such beliefs that a so properly basic, self-evident and self-justifying that they require no further verification or justificatory supports from other beliefs as the foundationalists assume. In response to such assumption, Bertrand Russel asks: "Is there any knowledge in the world which is so certain that no reasonable man could doubt it" (1). In fact, for David Hamlyn, such belief grounds for knowledge as "impossible, hopeless…." (Qtd. in Omoregbe, 55). Critics argue that the claim of such basic beliefs is a gratuitous assumption.

Moreover, taking our subjective rational intuitive or perceptual states as the basis of our objective claims to knowledge is epistemologically too weak as grounds of justification to address the sceptics' challenge. This is because objective certainty cannot be made to rest on the quicks and of our subjective experiences without the risk of error on account of the fallible nature of these cognitive states. Hence, any statement as to what it is that our immediate experiences make us know may not likely exhaust the contents of our objective claim due to the problem with our perception, as the sceptics have argued.

5. Coherentism

Coherentism is another traditional anti-sceptical theory of epistemic justification, which attempts to address the sceptics' *infinite regress* argument on the justification of beliefs. Traditionally, the coherentists see "reality as a collection of beliefs" (Etuk, *An Exposition of the Cognitive Problems…,* 960); and so, hold the view that knowledge is a web of beliefs, and that justification of knowledge is possible by a holistic process. For this reason, rather than the linear process of justifying non-basic beliefs deductively from the basic ones as adopted by the foundationalists, the coherentists adopt a "holistic conception of knowledge justification" (Dancy, 127). This way, justification embraces a holistic process such that the justification for the belief that "p", for instance, is the belief "y" and the justification for the belief "y" is the belief

"z" and the justification for the belief "z" is the belief "p", in such a "mutually consistent, co-tenable and supportive manner" (Elgin, 156). Each component of the belief set must be consistent or cohere with one another in the set for it to be justified.

In short, for the coherentists, there is no need to be sceptical about knowledge, for a belief or knowledge claim can be justified if it "belongs to a coherent set of beliefs" (Haack, 17). In simple terms, "a proposition is true if it forms part of a suitably formed set of optimally coherent propositions" (Rescher, 145). Thus, a belief is justified if it contributes to the *coherence* of each of the belief-set of which it is a member. For the coherentists, individual beliefs are not basic, not indubitable or incorrigible; they are merely presumptive or potential knowledge. Each belief is to be evaluated by the role it plays in the belief-set. If the set is more coherent with a given belief, rather than with aby alternative, the belief is justified, otherwise it is not (Dancy, 116). Thus, the test is the system; for it is its capacity to contribute towards a well-ordered systemic whole, in a mutually supportive way that constitutes the basis for the justification of a belief. Coherentism is usually associated with the continental rationalists and the Hegelians, as well as with more recent advocates as Laurence BonJour, Wilfred Sellars, Keith Lehrah, Brand Blanshard and Nicholas Rescher.

Notwithstanding its persuasive character, coherentism faces some epistemic defects that vitiates its capacity to address the sceptics' challenge. For instance, the conception of knowledge as a "web of beliefs", leans more on the wings of empirical or *synthetic* knowledge, which is subjective, than on the rational or *a priori* knowledge, which is objective. The fact that a belief at the edge of the web or set is less certain at the start and could be added or subtracted easily from the web or set depending on its consistency – implies that all knowledge the web or set produces is subjective and provisional, as any of the belief item could be retracted in the course of cognitive progress. This tends to negate the possibility of *a priori* knowledge such as, "every event must have a cause" or "2 + 3 =5". Thus, within such a conceptual framework characterized by contingents or provisional nature of the belief items, nothing can be an objective knowledge. Coherentism, thus, falls short of its inability to account for *a priori* knowledge.

6. Gettier Problem and Post-Gettier Theories of Justification

Despite its long history of prominence in epistemology history, the traditional account of knowledge as "justified true belief" was celebrated only but for a time. Its popularity was challenged by Edmund Gettier, when he raised the awareness of all to the inadequacy of the tripartite conditions (belief, truth, and justification) for knowledge with his counterexamples. In his 1963 paper titled, "Is Justified True Belief Knowledge?", Gettier, through these counterexamples, ultimately raised some sceptical considerations about the possibility of knowledge by particularly demonstrating that justification is not always reliable as a criterion for knowledge, because of the possibility of being mistaken or deceived about what we think we know as well as the possibility of luck or mere coincidence masquerading as knowledge. Gettier's argument carries the essential message that in case of justification, there may be some facts unknown to us, but which if they were to take into consideration, would certainly weaken our justification. This means that our justification may be false even when our belief is true.

One of his counterexamples is about two job seekers, namely: Smith and Jones, who have applied for a certain job: Suppose that Smith and Jones have applied for a certain job. And suppose that Smith had strong evidence for the following conjunctive proposition: (d) Jones is the man who will get the job, and Jones has ten coins in his pocket. Smith's evidence for (d) might be that the President of the company assured him that Jones would in the end be selected, and that he, Smith, had counted the coins in Jones' pocket ten minutes ago. Proposition (d) entails: (e) the man who will get the job has ten coins in his pocket. Let us suppose that Smith sees the entailment from (d) to (e) and accept (e) on the grounds of (d), for which he has strong evidence. In this case, Smith is clearly justified in believing that (e) is true (121). However, it happens that Smith himself got the job, and coincidentally, but unknown to Smith, he has ten coins in his pocket. Thus (e) is true and Smith justifiably believes (e). However, Gettier maintains further that: It is equally clear that Smith does not know that (e) is true; for (e) is true in virtue of the number of coins in Smith's pocket, and Smith bases his belief in (e) on the account of the coins in Jones' pocket, whom he falsely believes to be the man who will get the job (122 –123).

It is claimed by Gettier's counterexamples that presumed epistemic justification of JTB theory of knowledge is not irrefutable. The refutability notion in Gettier's problem is saying, shortly, that "no epistemically justified true belief could be enumerated as an instance of knowledge as long as there exist or might be existed a refuting belief, evidence or proposition" (Abbasian, 109). Gettier, thus, points out with this counterexample that the tripartite account of knowledge is insufficient, and particularly the problem with justification, because it is possible for someone not to know even when all the three conditions for knowledge seem to have been satisfied (Etuk, *The Truth about Truth….* 65). The emphasis here is that it is possible for a man with a true belief to have evidence for his belief but at the same time does not know. In the case above, Smith undoubtedly has a justified true belief, yet, he clearly does not have knowledge. His

true belief is not based on conclusive or adequately justified evidence. What seems to be his knowledge here (e) is nothing but a mere coincidence because he holds a true belief but based on facts irrelevant to the truth of the belief. This not only shows that our justification may be false even when our belief is true, but ultimately re-enforces the sceptics' challenge to the possibility of knowledge on account of want of certainty. This awareness by Gettier's analysis, elicited a storm in the epistemology world, tilting the course of epistemological discussions in recent times to the search for more adequate ways of justifying knowledge with what might constitute the fourth or supplementing condition of knowledge that guarantees certainty or get a Gettier-proof definition of knowledge. In the sequel, several post-Gettier theories of justification have emerged in contemporary epistemology. Three of these are here examined.

7. The Defeasibility Theory

One strategy for addressing the Gettier problem is to add the irrefutability or indefeasibility notion as a necessary fourth condition to the JTB traditional account of knowledge. Proponents of this strategy have expressed the notion of irrefutability as a new fourth condition: the epistemic justification for truth of a belief is not a refutable one. So, on this strategy, "knowledge is unrefutably justified true belief" (Abbasian, 109). The idea of epistemic defeasibility was introduced into epistemology as an argument in one of the main strategies for dealing with the Gettier problem through the works of such philosophers as Ernest Sosa, Keith Lehrer, Thomas Paxson, Peter Klein, Risto Hilpinen, and Marshal Swain. What all defeasibility theories of justification of propositional knowledge have in common is that the Gettier-inspired counterexamples to the traditional account of knowledge involves a defeater, which prevent such cases from being true cases of knowledge. In order to say that *S* knows *p,* it is not enough the *S* has a justified true belief: *S's* justification must also not be defeated (Scaduto-Horn, 40).

A defeater is such that it is true, and if and if a justified true believer were aware of it, then he would no longer be justified in believing whatever it is that he believes (the reason being that the defeater undermines the original evidence of his belief). According to the epistemic defeasibility theory, the defect involved in the justification in the traditional account of knowledge, as revealed by Gettier, can be characterized in terms of evidence that the subject does not possess and which overrides, or defeats the subject's prima facie justification for the belief. That is, the weakness in knowledge as "justified true belief" is that of inconclusive evidence, because "there are some truths which would have destroyed the believer's justification had he believed them" (Dancy, 29).

The problem in the Gettier case, according to this theory, is thus, that of undiscovered fact or evidence: Smith did not discover that he had ten coins in his pocket. The basic lesson emerging in the defeasibility theory, therefore, is that, sometimes our "justified true belief" is not knowledge, because the justification is essentially incomplete. Our beliefs do not often consider all the important evidence for them. There are some facts, which if we were to consider, would seriously weaken our justification – and which we, therefore, should have taken into account. Hence, the defeasibility theory holds that, for *S* to know *p*, there must be no other evidence against *p* strong enough to undermine or defeat *S's* belief that *p*, should this evidence come to *S's* attention (Levy, 155). The suggestion then is that a fourth condition of *defeasibility* be added to the traditional account of knowledge, to the effect that, there be no other evidence (undercover fact or defeater) such that *S's* believing it would defeat or destroy his justification for believing that *p*. Or, that the addition of further evidence should not defeat his justification for believing that *p.* The defeasibility theorists, thus, require indefeasible justification for knowledge. In view of this, they conceive knowledge as, "indefeasibly justified true belief" (Swain, 67 156). By implication, a given belief is knowledge if and only if it is true and *undefeatedly* justified. The reason that the above Gettier cases are not counted as instances of knowledge is that the justification provided for the truth of the considered belief leaves open the possibility of existing a refuting proposition, evidence, or belief.

The defeasibility theory might appear promising in addressing the Gettier problem, especially from the fact that it seems to create an extension to the requirement that nothing can be known which is inferred from a false belief. However, there are certain inherent epistemic weaknesses that hamstring its adequacy in addressing the sceptics' challenge. Prominent among the reasons is that, it excludes too much from what we know. Our everyday understanding of knowledge is not in agreement with this conception of knowledge justification, which seems to be "a drastic response to Gettier's challenge" (Abbasian, 110). Again, there is a problem here arising from the notion of irrefutability or indefeasibility itself that, "the epistemic justification for truth is not a refutable one". Here, one may ask: Is this very notion or belief that the epistemic justification of a belief is not a refutable one itself an epistemically justified and irrefutable one or not? How can we regard the irrefutability notion as a decisive constituent of a theory of knowledge? To put it in another word, is the notion of irrefutability is itself epistemically justified or not?

The truth is that in the event of its being an epistemically justified notion, it will encounter again the Gettier problem and its disturbing outcomes because, there could be other undiscovered notion or evidence such that if we were to belief

it could upturn the justification of irrefutability or render us unjustified in holding the belief. This way, the regress continues, and the theory conveniently plays us back into the hands of the sceptics.

8. Causal Theory

The Causal theory of knowledge or justification states that for knowledge to exist, one must have a belief about something true, and that belief must have a causal relation to the truth. Foregrounding this position is the assumption by the proponents of this theory that, since nothing happens without a cause, there must always be a causal link between belief and truth. On this assumption, they propose a causal supplement to the traditional tripartite account of knowledge. For example, my knowledge that there is wine in my glass is causally connected to my having poured wine into the glass, and my state of mild intoxication. The causal theory of knowledge was first proposed by Alvin Goldman in his 1967 Paper, "A Causal Theory of Knowledge", as a causal supplement to solve the Gettier problem with the traditional tripartite definition of knowledge. "The premises are as followed: (I) p is true, (II) S believes that p, and (III) S's belief that p was caused by the fact that p. Although this is the original version of the theory, Goldman proposes a revised version which states (III) as 'S knows p if and only if the fact p is causally connected in an appropriate way with S's believing p.'" In other words, a necessary condition of S's knowing p is that S must have a causal connection to p. This condition relies on the fact that S must have the perception of the world around her. The causal theory, then, focuses on objects of appropriate knowledge gained through perception, testimony, introspective memory, and obscure inference.

Analyzing the Gettier's counterexamples, Goldman maintains that it is just coincidence that Smith's justified true belief (e) is true. According to him, there was some inference here that was made from a premise that was considered a justified belief, but not about something true. In other words, what makes the belief (e) true, is not what caused Smith to believe it, but the fact that he has strong evidence of Jones' getting the job and having ten coins in his pocket. There seems here to be a missing link between the belief and its truth based on an inference made from a false premise. The fact that it is coincidental that the belief true, thus, becomes obvious. We, therefore, need a link between belief and truth to prevent this happening, and a causal link seems promising. The purpose of the causal theory, therefore, to establish that causal link so as to eliminate the inferences that begins from a false premise. Hence, for the causal theory, in order for there to be knowledge, there must be a causal chain, however, complex, between a belief and its truth. Goldman specifically formulates the causal theory as follows: S knows that p if and only if the fact p is causally connected in an 'appropriate' way with S's believing p (357). In other words, Goldman proposes, as a fourth condition for knowledge that p, that the fact that p should cause S's belief that p. for the causal theorists, therefore, knowledge is "appropriately caused belief".

Promising as it may seem, this theory, however, is fraught with certain defects. Among them is that the analyses of "causation" by this theory, seems to make justification an external affair rather than an internal activity in the mind of the knowing subject. Besides, it makes inferential or general knowledge impossible, since it inevitably limits knowledge only to the causal relation between a certain belief and its truth. For instance, based on the causal theory, how can we determine the truth of the belief that "All living things respond to stimuli"? Furthermore, this theory can still be challenged by the Gettier-style examples in which the belief in question is indeed causally connected with the true belief, by the individual holding the belief only holds it luckily, as Goldman himself later ientified. He realized that the causal theory allows cases in which there is an appropriate causal connection while there is a lack of knowledge.

The fake-barn example he gave, is a point in case: Henry drives through the country-side and points to barns in the field. Goldman himself presented such a counter-example – barn façades – in his 1976 Paper, "Discrimination and Perceptual Knowledge". This barn façades example supposes that one makes a direct empirical observation of an object and forms a belief about it but is unaware of external factors that make the belief a matter of extraordinary luck. The example describes an individual, Henry, who sees a barn, and thus forms a propositional belief that he sees a barn. Henry is correct – that is, his belief is true. Because he happens to be in the countryside, and one would not normally expect that some barn-like objects in the countryside would be anything other than a barn. Most would agree that Henry is justified. Thus, Henry has a justified true belief that what he sees is a barn. However, it turns out that the area in which Henry found the barn is scattered with facades of barns – that is, constructions that are meant to look like barns, but are not, in fact, barns. In actuality, the barn that Henry found was one of a very small number of actual barns in the area, and it is by sheer luck the Henry happen to form his belief about that particular object (771 – 791).

The point of this barn-amidst-facades shows evidently that, a suitably or an appropriately caused belief is not sufficient enough to be characterized as knowledge, because even though his belief is true, yet he is unaware of external factors (facades) that make the belief a matter of extraordinary luck. Goldman himself admits that his previous causal theory of knowledge does not hold up to the barn example: My old causal analysis cannot handle the problem either. Henry's

belief that the object is caused by the presence of the barn; indeed, the causal process is a perceptual one. Nonetheless, we are not prepared to say that Henry knows (771).

9. Reliability Theory

The Reliability theory holds that "a justified true belief can be knowledge when it is derived from a reliable method" (Dancy, 31). In other words, what turns a belief into knowledge is the reliability of the process of producing it; hence, "knowledge is belief produced by a reliable process" (Rescher, 6). For the Reliability theorists, the crucial question is, how reliable is a belief-producing process before we commit it as bearing truth? They emphasize the truth conduciveness of a belief-forming process, method, or other epistemologically relevant factors. In the Gettier's counterexample discussed above, Smith, who eventually got the job, arrived at the true belief that the man who has ten coins in his pocket will get the job by mere luck or coincidence, rather than a reliable process. It was simply an accidentally true belief, which cannot count as knowledge. However, for the reliability theorists, one has a justified belief that *p*, if and only if the belief is a reliable process. What is meant by "reliable" here is that, "a certain method if properly followed, is perfectly reliable and never leads to a false belief" (Dancy, 31).

The idea that reliability should be a central notion in the analysis of knowledge was first put forward by Frank Ramsey in his 1931 essay titled, Knowledge, where he says that, "a belief is knowledge if it is true, certain and obtained by a reliable process" (126). Another early proponent of this theory was Peter Unger, who proposed that, "*S* knows that *P* just in case it is not at all accidental that *S* is right about its being the case that *P*" (157). David Armstrong also offered an analysis of non-inferential knowledge where he explicitly employed the term 'reliable', to draw an analogy between a thermometer that reliably indicates the temperature and a belief that reliably indicates truth. Also, in 1975, Alvin Goldman offered his first formulation of a reliable process of knowing. He defines a normal world to be one consistent with our general beliefs about the actual world, and then proposes that "justification requires production by cognitive processes that are reliable in normal worlds" (qtd. in Pollock and Cruz, 115). Generally, the reliability theorists intend to write a reliability condition into the definition of knowledge itself. Hence, a broad reliability theory of knowledge justification can be stated as follows that X knows p if and only if the following conditions are present: (1) *p* is true (2) *X* believes that p (3) *X*'s belief that *p* was formed by a reliable method.

The Reliability theory does not appear reliable enough to address the sceptics challenge, notwithstanding its popularity. In the first instance, quite apart from the general difficulty of distinguishing between a defect in the method and a defect in the manner in which the method has been applied, it seems improbable that there are any perfect reliable methods of acquiring beliefs. Man is fallible and this fallibility is manifested not just in the manner in which the methods are used, but in the belief-gathering methods available to man. In view of this, Dancy confirms that, "if knowledge requires an infallible or perfectly reliable method, it is impossible" (31). Ozumba surmises it thus: "the route to belief, truth and justification is fraught with possible pitfalls" (167). What this conduces to saying is that absolute certainty in our knowing processes or methods is all too difficult to obtain, given our human limitations.

Hence, the reliability theory is seemingly placing an impossible demand for knowledge justification. Another objection to this theory is that credited to Stephen Stich in his work, The Fragmentation of Reason. Reliability considers that for generating beliefs, a process needs to be reliable in a set of relevant possible scenario. However, according to Stich, these scenarios are not absolute or universally determined, but "are chosen in a culturally biased manner" (Wikipedia, n. p.). Hence, there can be no unilateral process; rather, all accounts of normative epistemic terms are culturally biased. In the absence of such universal reliable process, knowledge would be impossible following the reliability theory. This again, opens the door of scepticism. W. V. O. Quine also maintains this line of thought as he states that epistemic standards of justification are "not absolute but relative to some background language" (Ontological Relativity... 48).

Again, there is the "generality problem" attending this theory. The argument here is that, for any given justified belief (or instance of knowledge), one can easily identify many different (concurrently operating) "processes" from which the belief results. For instance, my belief that there is a bird in the tree outside my window might be a result of the process beliefs on the basis of sense-perception, visual perception, visual-sense perception, through non-opaque surfaces in daylight, or a variety of different very specifically described processes. Some of these processes might be statistically reliable while others might not. For this reason, it would be better to say, in any case that we are choosing not which process to say resulted in the belief, but instead, how to describe the process out of the many levels of generality, one which it can be accurately described.

10. Intervention with Epistemological Functionalism

Notwithstanding the peculiarities of their epistemic defects of each of the theories of justification discussed above, their overall vulnerability to the sceptics' challenge is due to that fact that they all propose on a single, fixed, and grand theory of rational justification. Such an approach which appears to be an extension of the formalist logical mode of relations between ideas, terms and propositions to the domain of epistemology, equates rational justification of knowledge with logicality. Any theory of justification with such theoretical framework would certainly fall short of meeting the demands for rational success in countervailing skepticism, because such background assumption that "the order of nature is fixed and stable, and that the human mind acquires mastery of it by operating in accordance with principles of understanding that are equally fixed and universal" (Toulmin, 44), is highly limited, epistemologically exclusivist and problematic. Extending such background assumption or framework to the domain of justification of knowledge in epistemology – as do the theories discussed above – implies a demand for a single fixed rational grounds or basis for holding our beliefs. By this it is understood that "genuine knowledge must be based on the framework of rationality which consists in a fixed set of historically and culturally neutral principles" (Ukpokolo, 98)! Here lies the problem!

However, the truth is that any consideration of a single, fixed, and grand theory of rational justification, which focuses on 'form' rather than 'function' will remain vulnerable to the sceptics' challenge. As Lyotard clearly points out "any attempt at a general epistemology falls victim to the inventor's paraplogy" (73). The reason is that, since such ratioanl scheme undermines the complexities and diversities of human history and experiences and reduces justification to a determinate rational or formal logical project, it will always fall short of the requirement of absolute certainty which such rational scheme needs to countervail the sceptics' challenge, whereas "fallibilism is our destiny" (Rescher, 36).

A move in epistemic justification is therefore necessary from a single, fixed rational 'form' to 'function', within the cognitive perspective of epistemological functionalism. This requires the abandonment of any grand, universal, transcultural rational scheme for understanding and justifying knowledge to function – the practicality and peculiarity of contents of discourse. The functionalist epistemology generally rejects any consensus over a single, universal regulative ideal of rational discourse, arguing instead for a more positive disposition towards the contingency and particularity of our experience of reality (Rorty, 318). Within this context, we have an epistemic situation characterized by a fundamental heterogeneity of rational justification of knowledge based on considerations of functional efficiency of such knowledge-claim to a people in a given cultural environment. Epistemological functionalism, thus, admits of cultural pluralism in human societies characterized by differences in rational justification of knowledge-claims on grounds of functional efficiency that are fundamentally incommensurable. To this effect, there is no common ground that allows for any general theory of epistemic justification of knowledge.

Thus, behind the functionalist epistemology or epistemological functionalism is the conviction that a people's culture and historical development are significant to what define the enterprise of their rational inquiry. Hence, what constitutes knowledge at a given time is not independent of a people's culture and history. For this reason, a belief ought to justified as knowledge, not abstractly with any single, universal and grand theory of rational justification, but in relation to which such belief aid a people in engaging their environment, encountering their world and confronting their problems. The pragmatic functionality of a belief is, and ought, therefore, to be the basic determinant of its justification as knowledge. Within this epistemic functionalist justification perspective, the sceptics' challenge – rooted in want of objective certainty in our knowledge claims – does not arise, since the consideration is not on abstract formalism that inquires after objective rational grounds, but on functional efficiency in relation to what defines a given people's enterprise of knowledge inquiry.

11. Conclusion

Certainly, the fact that knowledge must be certain has opened the door to skepticism in philosophy. But skepticism is beneficial since it defines one of the central problems in epistemology, namely need to demonstrate how knowledge is possible. This has given rise to such traditional anti-sceptical theories of justification as Foundationalsm and Coherentism, and the post-Gettier theories of epistemic justification, which have been critically examined in this paper. That each of these theories has not met the conditions for rational success in countervailing the sceptics' challenge has been discovered to be a function of their focus on a single, fixed and objective theory of rationality. In view of these failure and of the need to seek better perspectives on justification of knowledge that can more effectively tackle the sceptics' challenge, epistemological functionalism, which focuses on 'function' rather than 'form' has been adopted in this paper. Within this context, a belief is justified not abstractly, but in relation to which it aids a people in engaging their environment, encountering their world and confronting their problems. This perspective has greater potential is tackling the sceptics' challenge and addressing the problem of knowledge justification in epistemology.

Compliance with ethical standards

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