Fallibilism Theory and the Fate of Knowledge Progress in (Igbo) African Society: A Conversation with Amaechi Udefi

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Abstract
The Igbo knowledge system articulated by Amaechi Udefi is insufficient to ensure knowledge progress as opposed to the system found in fallibilism theory. The reason is that there is a level of intellectual openness fallibilism theory guarantees that is not found in Udefi's thought. This paper aims to do a comparative study of fallibilism theory (using Karl Popper's falsifiability theory) and Udefi's account of the Igbo knowledge system. The study also investigates to what extent each knowledge system can ensure knowledge growth and development. The significance of this study is to highlight the importance of knowledge progress in the overall development of society. This paper argues that even though Udefi and Popper were reasoning from different cultural environments, Popper's falsifiability theory is more open to knowledge progress than Udefi's Igbo knowledge system. The expository, historical, comparative and evaluative methods were used.
Keywords: Fallibilism, Falsifiability, Scientific Progress, Igbo people, Epistemology

Introduction

In the preface to the first edition of Karl Popper's [Logic of Scientific Discovery], Buckinghamshire Penn observed that "The central problem of epistemology is the problem of the growth of knowledge which can best be studied by studying the growth of scientific knowledge" (2005, XVIII). What can be inferred from this is that any knowledge that does not give room for the growth of knowledge cannot be considered to enjoy central role within the epistemological sphere. Epistemologists have always been conscious of this, as such, in their quest to satisfy this longing, they seek to develop doctrines, theories and principles that can guarantee knowledge progress. Fallibilism, a philosophical doctrine, holds that absolute certainty about knowledge is impossible. There can always be a loophole which can render what we claim as knowledge false. This implies that no knowledge is conclusive because knowledge is always subject to change. Therefore, new knowledge can falsify old propositions. A classic example is the Copernican Heliocentrism against Geocentrism. But, Amaechi Udefi argues that

the Igbo knowledge system, among other means, uses the inductive method in justifying knowledge claims and does it by appealing to spiritistic and human agencies. However, the concern is whether Udefi's inductive method can bring about knowledge growth.

To address this question of knowledge/scientific growth in indigenous Igbo society, we shall use Karl Popper's falsifiability theory. Popper believes that for knowledge growth to be possible, scientific/knowledge systems should be such that they can be falsified. Only then will it satisfy the criterion for the empirical character of a system of the statement. Therefore, in the system(s) of the statement(s), we should be able to discover a reproducible effect which refutes the theory.

In this work, we adopt the expository, historical, comparative and evaluative method. In the expository method, we carefully expose the tenets of fallibilism theory and the nature of Igbo knowledge system. In the historical method, we trace the history of fallibilism to understand the origin of its development and application. In the comparative method, we carefully compare Popper's falsifiability theory with the Igbo knowledge system articulated by Udefi. In the evaluative method, we evaluate fallibilism theory by weighing the pros and cons. In this work, we shall expose and examine the meaning of fallibilism and falsifiability, respectively. We will also examine the Igbo knowledge system in Udefi's thought to understand its nature, and compare Popper's falsifiability theory and Udefi's Igbo knowledge system to help us appreciate both. Finally, we shall argue that even though both were reasoning from different cultural environments, Popper's falsifiability theory is more open to knowledge progress than Udefi's Igbo knowledge system.

Fallibilism Theory: History and Meaning

Fallibilism, as a philosophical doctrine, maintains that our scientific knowledge claims are vulnerable and may eventually turn out to be false. One cannot categorically maintain that a scientific theory is true but can only say that it has the probability of being true. Fallibilism thesis was already present in the views of early Greek philosophers, but as a formal doctrine, it is strongly associated with the late 19th-century philosopher Charles Sander Peirce, who used it in his attack on foundationalism. It was later that Popper and other philosophers developed and expanded the concept's meaning. Charles Peirce argues that we must acknowledge our inability to attain the final and definitive truth in the theoretical concerns of nature science (1967, 130). In other words, due to nature's dynamism, science cannot claim to provide us with the final picture of physical realities. Scientific knowledge is, therefore, not a "money bank". History of science has shown that each of our accepted beliefs may/will turn out to be false (RESHER 1995, 89). Peirce, therefore, argues that we have no assurance that our scientific theories or systems are true. This is because any scientific theory is a product of human contrivance and as such, is subject to being flexible and impermanent. Every material or cognitive structure is open to encountering conditions the contributors did not engage in. And when such a condition or situation emerges, it is likely to render its ultimate failure feasible. Hence, falsifiability of a scientific theory is what brings about the change.

Hilary Putnam in an attempt to offer a new view of reality, toes the line of fallibilism. He argues that there are different ways of seeing and understanding the realities in the world. Consequently, any way of understanding the world emerges only from within a specific conceptual scheme, and it can only be reasonable when considered only from that particular scheme (PUTNAM 1986, 19). Putnam was convinced that for knowledge progress, fallibilism is an indispensable factor for we can never be assured that we are right on some issues, because it may turn out that we are wrong but this does not make fallibilism same as scepticism (1987, 21). This is because fallibilism does neither imply knowledge abandonment nor no truth but untenability of a logically conclusive justification for knowledge and clarification of the truth of our beliefs. It helps us to adopt a cautious stance towards our beliefs. Therefore, the defeasibility of knowledge claim does not undermine the knowledge we already possess. It rather enhances it.

Having examined generally the meaning and basic tenets of fallibilism theory, we are going to look at Popper's falsifiability theory as a paradigm.

Karl Popper's Falsifiability Theory: A Paradigm for Knowledge Progress

Karl Raimund Popper (1902-1994) was an Austrian-born British philosopher. He is well known for his theory of scientific method and his criticism of historical determinism. His book mentioned earlier was a big eye-opener to the world on how best to carry out scientific investigations. His criticism of induction was a transformative idea and event in the philosophy of science. According to Carlo Veronesi, Popper's philosophy of science took off by addressing two fundamental problems in epistemology: "Hume's problem of induction and Kant's problem of demarcation (2014, 179). Understanding how Popper dealt with these two problems is fundamental to appreciating Popper's falsifiability theory.

Before Popper, science has always strived on the principles of induction. This inductive method was used to solve the problem of demarcation, distinguishing empirical science from metaphysical speculation. Popper, however, thinks differently about this. He believes that the principle of induction cannot provide the criterion for demarcation because "it does not provide a suitable distinguishing mark of the empirical, non-metaphysical character of a theoretical system (POPPER 2005, 11). Popper's rejection of the inductive method as a criterion for demarcation stems from his conviction that it is not legitimate to go from particular cases to universal law. In other words, the problem of induction consists of asking for a logical justification of universal statement about reality (POPPER, 2005, 14). He cites an example with the popular statement that "All swans are white". This conclusion was drawn by observing some white swans. Popper, however, argues that no matter how many white swans one observes, no one can be certain that the statement "All swans are white" will always be valid in all places of space and time. A single observation of a black swan can falsify the statement. He, therefore, argues that falsifiability is the only criterion for demarcation. Veronesi analysing Popper's view on falsifiability is that"it is precisely the possibility of falsification that characterises the empirical science and which according to Popper, draws the line of demarcation between the theories of science and the doctrine of metaphysics or pseudoscience" (2014, 179). Wojciech Olszewski corroborates this but warns that Popper's falsifiability is only but

a criterion for demarcating science and non-science. He did not claim that it is the only extension used in practice to guide science (2011, 788).

There is no doubt that Popper's choice of falsifiability as a criterion for demarcation was informed by his desire to seek or search for scientific/ knowledge progress. His rejection of the inductive method is because it gives room for conclusive verification, and it is logically inadmissible (POPPER 2005, 18), and as such, slows down knowledge progress. Hence any criterion for demarcation has to open the window of empirical science to accommodate even statements which cannot be verified.

According to Popper, a theory is falsifiable "if there exist at least one non-empty class of homotypic basic statements which are forbidden by it, that is, if the class of its potential falsifiers is not empty" (2005, 95). In other words, a theory is falsifiable if its logical form can be singled out using empirical text in a negative sense. Such an empirical system should be capable of being refuted by experience (POPPER 2005, 18). This definition implies that every theory or claim to knowledge must be prepared to risk falsification. Hence, no scientific theory can be conclusively justified or established. Jamil Jami observed that since Popper came up with this principle of falsifiability, it has come to be accepted as an essential component of scientific investigation. Hence any principle which is not falsifiable is not scientific (2008, 520). If Jami's observation is true, it implies that for a proposition or theory to qualify as being scientific, it must pass the 'falsifiability test' (POPPER 1962, 84). This is because knowledge, according to Saheli Basu, "grows through a continuous process of trial and error" (2018, 49).

However, Popper's falsifiability theory has received criticisms from many scholars. Thomas Kuhn argues that scientists carry out their work with a conceptual paradigm which strongly affects how they see data. As a result, scientists will go to any length to defend their paradigm against falsification (1970, 11), and they do this by adding an ad hoc hypothesis to existing theories. Imre Lakatos agrees with Kuhn that scientists work within a conceptual paradigm. However, Lakatos maintains that all scientific theories have a metaphysical hardcore essential for the generation of hypotheses and theoretical assumptions (1978, 13). Paul Fayerabend takes a different dimension in his critique of Popper's falsification. He argues that epistemological anarchism would be the only candidate if one is bent on having a universally valid methodological rule (1992, 15).

Notwithstanding these criticisms, there is no doubt that Popper's theory of falsifiability greatly influenced both the philosophy of science and contemporary thought. Popper's falsifiability theory could serve as a paradigm for knowledge growth as a result of its openness to the unknown in its search for better knowledge. Popper's falsifiability theory allows for the beginning of the search for truth by raising problems and entering the domain of the unknown. If a seeker of knowledge is afraid of probing into the world of the unknown, then he/she has already halted knowledge wittingly or unwittingly. Basu summarizes Popper's idea when he writes "Popper's idea is that scientific knowledge is available when we keep up with the habit of critical approach" (2018, 49).

The Nature of African (Igbo) Knowledge System in Amaechi Udefi

African knowledge system refers to experiential knowledge based on worldview and a culture that is basically relational. It is the upheld knowledge system of a people as evident in the functional aspect of a people's cultural practice. According to Udefi, the nature of African knowledge system is "the way Africans conceptualize, interpret, and apprehend reality within the context of African cultural and collective experience" (2014, 108). Every person has a peculiar knowledge system that features prominently in various facets of their lives. For instance, the way Africans interpret knowledge, truth and rationality differs from Western or alien cultures. This is because, according to Udefi, Africans interpret the concepts based on using African categories and concepts (2014, 108). Hence, this implies that the African knowledge system is a system whereby the culture and knowledge are embedded and preserved in the collective worldview of the Africans. Thus, the knowledge system in every society is "essentially owned by the social community; the leaders only act as the Chief gatekeeper" (IBAGERE, 1994, 83). For most African communities, their knowledge system is abstracted from their collective worldviews. For the Africans, the knowledge system hinges on materials such as myths, folklore, proverbs, and wisdom. According to Udefi, for one to understand the African knowledge system, one should pay attention to the African spiritualistic and dynamic metaphysics (2014, 109).

From Udefi's statement, we can say that understanding the modus operandi of gods, spirits, ancestors and material substances play a significant role in appreciating how the Africans conceptualize, interpret and apprehend reality within their cultural experience. It is because of this that Olayemi Ogunniyi, Willson Nze and Dare Olunniyi assert that the knowledge system, daily life and epistemic outlook of Africans are enshrined in their religion (2019, 5). This is because issues about African spiritualistic and dynamic metaphysics revolve around their religion. In order to substantiate his idea of the African knowledge system, Udefi uses the Igbo people of Southeastern Nigeria as a case study.

According to Udefi, the nature of Igbo[1] epistemology is essentially inductive. To highlight this, he makes use of two Igbo words, namely *Amamife* and *Nchekwube.* He translates knowledge as *Amamife* and belief as *Nchekwube* (2014, 114). For him, the Igbos use the word *Amamife* to demonstrate or explain those phenomena or events for which they have good reasons and can be verified through sense perception or observation. In other words, it is knowledge that is gained through first-hand information or personal witness. He provides for this type of knowledge because it is one in which one is prepared to provide evidence and justification for his claim (UDEFI 2014, 114). To illustrate this point, he uses an Igbo proverb to argue that it is what one sees that he can claim to know, ihe mu

[1] The Igbo people are one of the largest ethnic groups in West Africa, found mainly in Eastern Nigeria and parts of Equitorial Guinea. However, they are made up of subgroups with diverse social, traditional and cultural heritages. They are deep and original in culture notwithstanding the strong effect of colonialism and Christianity. These customs and traditions influence their knowledge system, use of language, religious beliefs and art e.t.c. The Igbo people are known for their integrative economic and religious linkage across cultural affiliations all over the world. The Igbo people are a very vast and well-travelled people and they live in community and share communal life.

huru n'anya ka mu ma (what I see with my eyes and supported by my mind/consciousness). Udefi further argues that the Igbos do not always consider second-hand information as that which is reliable. However, he exonerates the testimony or report from ndichie (elders), Ozo (titled holders) and dibia afa (native doctors). But then we know that *Amamife* is translated as wisdom not knowledge, while *Nchekwube* is translated as hope not belief. His inability to properly translate these words for Igbo epistemology indicates a distortion in his conception of these realities. Knowledge is translated in Igbo as *mmuta,* while belief is translated as *Nkwenye*. When we look at a knowledge system, we are concerned with the mode or methods in which *mmuta* and *nkwenye* are arrived at/or attained.

Furthermore, Udefi argues that just like the Western philosophy in which inductive reasoning infers from particular to universal, for the Igbos, past experiences provide sufficient ground to infer what will happen now and in the future (2014, 114). For example, the repeated witnessing of the beginning of rainy season from the *onwa ano na afo* that is the month of April, and the ending of the rainy season in *onwa iri,* that is the month of October and then the dry season, helps the Igbo people to plan their activities like the New yam festival. Hence, the ability of Igbo to use the cycle of the year to plan their activities is a piece of evidence that he uses scientific reasoning (induction) to plan his activities (2014, 114). Another example that he uses is the relationship between knowledge and truth. He argues that Igbos claim to know what they believe to be the truth. Hence, the Igbos would almost equate a knowledgeable person with a truthful person. In another way, a liar is not a knowledgeable person (2014, 115).

The Igbos believe that God is removed or distanced from mortal men; they have to reach him through other means in order to find out what God knows. This is where the non-human spirits and ancestors play a significant role. However, their role does not in any way remove the knowledge system's deterministic and cyclic nature. This form of epistemic attitude or model contradicts the scientific approach. This, however, does not seem to go well with Udefi who argues that the fact that the Igbo appeal or invoke oracle (*arusi*) or non-physical force for the validation of certain epistemic claims does not in any way mean that their epistemological attitude is in opposition to Western model. For him, when they do that, they are in tune with their culture (*Omenani*). He relied on H. H. Price statement to draw his conclusion on the "volitional and emotional factors or cultural element in knowledge validation" (1967, 49). Hence, appealing to spiritistic or any human agency for the validation of knowledge is only the way the human mind works (UDEFI 2014, 115). He further argues that the attempt by the Igbos to appeal to spiritistic or personal agency is only but a way to seek explanation on what seems to defy scientific explanation, for example, issues about ghosts, witchcraft, rain-making and so on. He insists that this type of attitude is not only akin to the Igbo, it is also found even in the Western world. Some of the spiritistic or personal agencies through which the Igbo seek knowledge or explanation are:

Mystical knowledge: This knowledge is gained by appealing to beyond/extra-sensory means. It is acquired through the help of the gods and other spiritual beings. Francis Etim calls the knowledge acquired through this means 'divination' (2013 130). Divination is the practice of venturing into the future by appeal to supernatural means through the help of a diviner, priest, witches, rainmakers etc., who are believed to possess innate abilities. This helps them manipulate the spirit world in favour of the natural world and see it as intermediaries between men and the spirit as they obtain information/truth about the past/future (NDUBISI, 2014, 34). It is a veritable way of gaining knowledge of realities that are beyond sense perception or things hidden from them for the Igbos.

Oral tradition: This knowledge is gained and transmitted through an oral medium from one generation to the next. It has to do with evolving, storing and transmitting knowledge and ideas. In African society, it is a major means of knowledge acquisition and transmission. It usually comes from proverbs, myths, stories, folk-tales, customs, legends etc. This oral tradition is very important since it is through the knowledge acquired by this method that a child is expected to get in tune with the demands of his/her society (NDUBISI 2014, 34).

Old age knowledge: In African society, old age is usually associated with a special type of knowledge. Thus, the older a person becomes, the more knowledgeable he is. The reason is that it is believed that the person has acquired much knowledge through experience. Hence the saying *ihe okenye tukwu ani hu, nwtakiri rigoro na enu ukwu osisi ogaghi ahu ya* meaning what an old man sees sitting down, a small child cannot see it even if he climbs the tree. It is believed that the wealth of experience of the old man always informs his epistemic decisions. Another reason for this type of knowledge is that according to the hierarchy of being in most African societies, for example, among the Igbo, old people are believed to be closer to the gods, who are the sources of all wisdom and knowledge. Therefore, the ontological status of old people confers a superior kind of knowledge to them. Ndubisi quoting Onyewuenyi, agrees to the ontological privilege of old men when he writes: "A person is said to know/have wisdom in as much as he approaches divine wisdom. And a person approaches divine wisdom when he/she becomes less fleshy" (2014, 34).

Inferential knowledge: This is the knowledge gained by a repeated act of a person, event/phenomenon. For instance, if a little child says the truth severally, the elders will conclude that the child is a truthful person. Therefore, if something happens and he/she is there, he/she will be called upon to narrate what transpired, and anything he said is taken as the truth. Previous experiences amplify this type of knowledge (NDUBISI 2014, 34).

Perceptual knowledge: The Igbos place huge premiums on experience. As a result, credit is always given to first-hand knowledge. The Igbos believe that knowledge can be gained through our senses. Hence the saying *Afunanya ekwere* (seeing is believing). According to Etim, in this type of knowledge, to know means that I have witnessed the event with my empirical senses (2013, 131). The question of deception by the senses is out of place. In a situation where the truth claim of knowledge is doubted, an appeal is made to eye-witness testimony. If the testimony is doubted, he/she is made to take an oath.

Other forms of Igbo knowledge systems exist. However, from the above discussions on Udefi's idea of Igbo knowledge system and others highlighted, we observe that knowledge in Igbo traditional society is more or less an appeal to spiritistic or human agencies rather than an objectivistic phenomenon. This agrees with Jimoh's assertion that the African claims to knowledge are not established to be true or false through scientific reasoning and experimentation (2017, 133). This is because, according to Jonathan Chimakonam, in African worldview, we approach reality in two ways, physical and spiritual, and both are fundamental (2013, 1). Also, Jack Aigbodiosh observes that "epistemic claims are extensions of our social values, interest and preferences" (1997, 19). Thus, we see that the validity of knowledge in African epistemology is derived from customs and habits; it does not depend on objectivist terms as we see in the rationalist and empiricist approaches to knowledge.

Fallibilism Theory Vs Igbo Knowledge System in Amaechi Udefi: The Fate of Knowledge Progress in Igbo Society.

From our study so far, we have tried to look at the two-knowledge systems to understand and appreciate their nature. From this, we deduce that fallibilism theory as examined from Karl Popper's perspective, is characterized by an appeal to a non-personal and inanimate object in its search for knowledge. It is also characterized by highly developed awareness of alternatives and less threatened or worried by the possibility of change. While for the Igbo, the knowledge system as captured by Udefi is such that involves the appeal to spiritistic and human agencies and seeks to provide grounds for the justification of knowledge claim. This is as a result of the Igbo people's reflection of realities with their worldview. These two knowledge systems are distinct in the sense that they tend to reflect the cultural atmosphere within their respective environment. Therefore, we shall look at how fallibilism theory of Popper can help improve the African knowledge system and vice versa.

The development of any society highly depends on the knowledge growth/progress within society. This is because a society's knowledge system can either create the environment for innovation and fresh ideas that can propel development or create an opposite situation. There is no doubt that fallibilism theory as an 'open' knowledge system offers more opportunities for knowledge progress than the Igbo knowledge system. This does not in any way mean that the Igbo knowledge system is retrogressive. But then, fallibilism theory "aims at the search for truth by raising problems and entering the area of the unknown" (KAGEYEMA 2003, 103). It opens new vistas for knowledge by searching for

ways to better knowledge. Kageyama insists that the Popperian process of trial and error is only an effort to keep going the unending search for truth. As such, as long as we pursue falsification, the search for truth will continue. Thus, fallibilism theory aims to overcome the present issue to search for the truth. It is not afraid of identifying what is wrong in a system. Hence, "fallibilism theory gives rise to problems by pointing out that somewhere in a theoretical system, something is wrong" (2003, 110).

In Igbo knowledge system as typified by Udefi, one can seek clarifications, but one is not expected to question knowledge from the gods, diviners, elders and so on, even though one is not bound by it. For instance, in knowledge acquired through mystical means like rain-making, witchcraft and so on, they try to exert control not just on how the knowledge is gained but also in the way they admit people who can have such knowledge. They argue that it has to be so in order for them to preserve the purity of the system. This makes scientific investigation difficult, and as such knowledge progress is retarded. But then, Udefi argued that even the western scientific man appeals to such when validating knowledge that defies common sense experience (2014, 115). However, the beauty of knowledge growth lies in the ability to subject it to falsifiability theory. Furthermore, the old age knowledge and oral tradition exhibit appeal to human agencies namely hierarchy and operating a top – down model of knowledge gain. It is believed that the older a person is, the more knowledgeable he is. This is why older people assume higher position in the hierarchy of being in Igbo cosmology. Hence in situations of doubt, an elderly person is consulted. This way of approaching knowledge does not encourage knowledge progress. The same applies to the oral tradition where knowledge moves top – down. Knowledge from such sources is meant to be absorbed without question because of the ontological status they enjoy. Udefi, however, argues that the attempt by the Igbos to appeal to spiritistic and personal agencies is to offer an explanation for what defies scientific solutions like spirit and witchcraft (2014, 115). Albert Ogoko (2008, 14-15) argues that "the reason why those forms of knowledge exist is because the Igbo seeks to know and to understand, to explain and to describe his/her experience and grasp realities within his/her worldview".

J. C. A. Agbakoba argues that in the development of philosophy and empirical science, the people's epistemic outlook contributes immensely. He argues that three sources can be enhanced to gain information that they would not have ordinarily gained. They are the senses, reason and intuition. The sense can be enhanced with telescopes, microscopes, stethoscopes e.t.c. Reason can be enhanced by the study of the methodic application of logic and mathematics. Intuition can be enhanced by divination, science etc (2000, 3). He further argues that for every society to develop or improve knowledge, it has to utilise one or more of these sources. He argues that whereas the enhancement of the senses and reason promotes scientific growth, the enhancement of intuition promotes magic. Therefore, the choice people make, go a long way to determining development. The point here is that if Igbo society wants rapid knowledge growth, it has to adopt an open epistemological system. Udefi argues that the Igbo knowledge system's inductive nature makes it almost similar to the Western scientific approach.

He further stated that in situations where Igbos appeal to non – physical forces or oral tradition has to be seen as what characterizes all human beings (2014, 115). However, I believe that if the Igbos adopt falsifiability theory it will bring about more positive choices. One may ask: why the fallibilism theory?

Critics of fallibilism theories like Thomas Kuhn, Paul Feyerabend and Imre Lakatos have argued that if theories were overthrown each time they face falsifications, then scientific activities/theories would have been halted and undeveloped. But then we know that falsifying a theory is not tantamount to its abandonment for the fallibilists. This is because, according to Joseph Agassi, accepting a theory is not the same as accepting it is as true (1975, 110-12). In the history of science, we discover that new theories and discoveries are made by falsifying existing theories. Thus, falsifying a theory enables us to see new/better ways/alternatives of doing things for instance, without falsification, Bohr's theory of atom could not have grown to become quantum mechanics as well as Copernican heliocentric theory developed into Newtonian new physics by Galileo and Kepler. The point is that the fallibilism theory helps us to develop a critical attitude needed for the development of modern science. As Kageyama remarks, "it is by taking falsifications seriously that science was able to grow to become modern science… it is fortunate for science that scientists took them seriously; otherwise, no problems would have emerged, and science would not have developed into what it is today" (2003, 116). There is no doubt that fallibilism/falsifiability is a method for discovering problems and ensuring knowledge / scientific progress. The Igbo people want knowledge progress, they are not afraid to venture into the unknown. However, we need to 'demystify' some elements in our knowledge system to give room for knowledge progress. Delving into the unknown does not in any way render knowledge useless rather it opens it up for progress. The reason we probe into the unknown is to improve or enhance knowledge. This is because our knowledge grows when our expectations are betrayed; reality will show its face apparently when our theories are falsified (BOYER 1994, 11).

Popper is optimistic that his method brings about discoveries. On the other hand, Udefi believes that the distinction Igbo make between knowledge and belief will help them to validate knowledge claims. The difference between the two is the end point of their epistemological project. This is due to the different cultural backgrounds each of them was writing from. What we see in this is that there are cultural elements in knowledge. However, there is still a need for improvement in both theories by Popper and Udefi.

Conclusion

Our study so far has shown that the indigenous Igbo knowledge system as typified by Udefi risks not being able to foster the needed knowledge progress since Popper's falsifiability theory seems to ensure 'epistemic transparency/intellectual openness' more than Udefi's. This does not in any way tend to show a superiority of culture but to enhance intellectual openness needed for knowledge progress. Fallibilism theory offers the Igbo knowledge system a way out. As Wesley Holiday observes, fallibilism creates multiple pictures of knowledge. "These multiple pictures are based on taking seriously the idea that there can be multiple

paths to knowing some proposition about the world" (2015, 97). Even though Udefi may argue that this multiple pictures to knowledge is present in Igbo knowledge system, however, it is not as evident as it is in Popper because it transcends human agencies. Udefi should recognize that for knowledge progress to happen, there is a need to develop the fallibilist epistemic attitude. In other words, there is a need to realize that there are multiple approaches to knowledge and that all those approaches must be explored. Knowledge is not a one-way traffic; it is about continuously falsifying an already existing system to bring about new ones.

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