

EXCLUSIVE RATIONALISM AND EMPIRICISM: A DISSERVICE TO THE THEORY OF KNOWLEDGE

Stephen Timothy AKPAN & Michael BENEDICT

Abstract

Philosophy is specifically understood as speculative science. That is to say that it is a science that seeks the truth for the sake of the truth or knowledge for the sake of knowledge. There are two major and parallel poles in the theory of this knowledge the rationalism and empiricism. This study intends to show that the two traditional sources of knowledge can be used in strengthening each other rather than engage in mutual exclusivism. It is a fact that everything has a beginning but it is unfortunate to take the beginning as an end to itself. It is more unfortunate to take the continuation as the beginning and end. Empirical knowledge ought to be seen as the beginning of knowledge and rationalism as the continuation of knowledge. Both should constitute true and universal knowledge. In reality, it is often difficult to have a one- way satisfying or universal truth without assistance from other areas. There are various methods of interpretation of the bible but none is self-sufficient, it is always required that other methods be diligently applied as well for authentic interpretation. The paper using the analytic method posit that the position that one method is sufficient in giving us the absolute explanations to all the problems and acquisition of knowledge as the exponents of rationalism and empiricism want us to believe. The use of the two major themes to give us relatively sure source of knowledge is a *conditio sine qua non*. This title suggests other nomenclatures such as, absolute rationalism/empiricism and radical rationalism/empiricism. They designate the position that excludes the other, and tenaciously hold on to one without respect or reference to the other. This paper concludes that we need the senses and we need reason. The combination of these with proper interpretation and understanding, gives adequate and better knowledge, after all, two good heads are better than one!

Keywords: Philosophy, Exclusivism, Rationalism, Empiricism

1. Introduction

The concept philosophy cannot be given one precise definition that captures its subject matter. This is because various definitions capture different context as well as different purposes. Philosophy etymologically is commonly known as the love of wisdom or the study of wisdom. This concept is rooted down to the Greek words of *Philos* (love) and *Sophia* (wisdom). And as such philosophy does not only seek knowledge for personal gains, it endeavours to seek wisdom which consists in the ability to draw meaning from experience, to judge experience wisely. For Immanuel Kant, philosophy is a critical activity, as critical activity it involves the examination of ideas we live by, this definition arises from Socrates, it is a reflective self-examination of principles just and happy life. By these

definitions philosophy is the study of general and fundamental concerning matters of human existence. Udoidem describes philosophy as “a one million naira question that is often asked by both the most learned and the unlearned of our society. Yet, ever since the question was raised thousands of years ago, it is still being asked today, and the answers received have been as unsatisfactory as they were at the first moment when it was first asked” (Udoidem, 1992, p. 1). For Wittgenstein, philosophy is, I know not what. For Socrates, it is a reflective self-examination of principles of the just and happy life, and for Kant, it is the articulation of the spirit of the age (Udoidem, 1992).

This is a show of the difficulty of a universal definition; however, according to Omoregbe (2017), the following are possible definitions:

- (1) Philosophy is a rational search for the answers to the questions that arise in the mind when we reflect on human experience
- (2) Philosophy is a rational search for answers to the basic questions about the ultimate meaning of reality as a whole and of human life in particular (p. 3).

Epistemology is one of the major branches in philosophy. The term epistemology is derived from two Greek words, “episteme” which means “*knowledge*” and “*logos*” which means logic or rationale. However, according to Everit and Fisher (1995), in contemporary usage, it has come to mean theory of knowledge. What then is knowledge? There are three ways of looking at the question what knowledge is. First we have capacity knowledge which is referred to as knowledge know how. This type of knowledge refers to the ability of the individual knowing how to do something. For instance, knowing how to put on the television, radio, how to drive a car.

The second type of knowledge is knowledge by acquaintance. This type of knowledge deals with the kind of knowledge of what exist in space and time, for example you can know a country, a building, a river or a painting. The third type of knowledge is propositional knowledge. In propositional knowledge, knowledge is defined as Justified Truth Belief. That is for any piece of information to be called knowledge it must satisfied these three conditions which are individually necessary and jointly sufficient for any knowledge claims. For example, to make statement that A knows P, it means that for the truth of

A knows that P. they are:

1. P is true
2. A believes that P
3. If A can justify that it is P.

The first condition, is called the truth condition, it states that you cannot know that something is true if in fact it is false. To know that p means that P must be true for example I know that Lokoja is the capital of Kogi State, it will be false to say that Lokoja is not the capital. The second condition, the condition that A believes that P. The fact that A believes P requires explanation. It is possible for A to know that Makurdi is the capital of Benue state. But that the knowledge A has comes from uncertain source. The concept believe only signifies that the source of knowledge could be faulty, which means that our knowledge could be inclusive. However, epistemically believe stands for the fact that the strength of conviction still remains undetermined by the second condition. The third condition A justifies that P. the third and final condition is stipulating, that is, the requirement of knowledge is that it must be justified here our believe about our statement of fact that Makurdi is the capital of Benue State is justified because it left the level of believe to justification of the fact the statement is true.

There are two schools of thought in epistemology, these schools disagree on the source our knowledge while, while the empiricist contend that it is derived from sense perception, the rationalist argue that it is generated from reason. The outstanding disagreement existing among rationalists and empiricists is within the revered area of epistemology. A branch of philosophy dedicated to the study of the nature, sources and limits of human knowledge. The distinguishing questions in epistemology include:

1. What is the nature of human knowledge?
2. How can we gain knowledge?
3. What are the limits to our knowledge? (Markie, 2004, August 19).

The dispute between these two epistemic schools emanates from the second question, namely, how can we gain knowledge? This disagreement leads them to give opposing opinions and even to regard the position of the other as nihilistic.

Epistemology is derived from the Greek *episteme*, and *logos*, word or explanation. “It is a branch of philosophy and chiefly concerned with the justification of knowledge-possibility” (Agede, 2019, p. 34). It is an enquiring into what can be known and how it can be known (Kenny, 2004, p. 145). In line with this, Akpen (2018, p. 24) summarizes it as “the branch of philosophy concerned with enquiry into the nature, sources and validity of knowledge”. There has always been in the study of epistemology a conflicting relationship between the rationalist and the empiricist, with each claiming to have the surest and only true way to knowledge. This position is confirmed in the works of the various exponents of both rationalism and empiricism. While the rationalists would say that knowledge is innate, that is inborn, the empiricists would say that

there is nothing in the mind that was not first experienced, that is, everything comes from experience. There is no doubt that there are similarities between rationalism and empiricism despite the controversy. Both make attempts to answer the fundamental questions of the theory of Knowledge, namely, what is knowledge? What can we know? How do we have it? When do we know it? There are certain knowledge that humans possess that are *a priori*, that is, without experience and there are certain knowledge that humans possess that are *a posteriori*, that is experienced based. In my opinion, the acceptance of the opposing views by each will be beneficial to Epistemology in particular and philosophy in general. In view of this, this paper studies this topic under the following subtopics: The Basic Arguments of Rationalism and Empiricism, Positive Values of Rationalism and Empiricism in Philosophy, Areas of Disservice and a conclusion.

2. Basic Arguments of Rationalism and Empiricism

The argument of the origin of knowledge has given birth to two outstanding and important schools of thought, namely, (a) that which concerns itself with the question of whether knowledge is innate, that is, present in the mind at birth therefore when the time is due, the ideas spring up naturally and (b) that which concerns itself with the question whether knowledge is empirical, that is, acquired through experience or sense perception, which means nothing is in the mind, one needs experience before anything is known. These have been of major concern for a long time not only in philosophy but in linguistics and psychology (Martinich and Stroll, 2020, October, 12). The two outstanding schools of thought are outlined thus: rational source of knowledge or rationalism and empirical source of knowledge or empiricism.

3. Rationalism

This is a philosophical position whose basic teaching on its source of knowledge holds that true knowledge can only be gotten through reasoning. This can also be called intellectualism. They hold that every human is born with certain basic ideas in his mind and that these basic ideas are known immediately and spontaneously as soon as a man reaches the age of reason without having to learn them. Both Plato and Descartes maintain that true knowledge is already within us in the nature of innate ideas, which we do not acquire but are born within (Popkin and Stroll, 1993, p. 203), and the process of learning begins with these basic ideas known as innate. They believe and teach that a fundamentally important kind of knowledge can be achieved *a priori*, that is, independently of sensory experience (Bruce, 2008, p. 23). The exponents of this school of thought such as Rene Descartes, Spinoza and Leibniz ignore experience as a source of true knowledge and emphasize the role of reason in order to attend clear and certain knowledge. For them, reason alone, using the mathematical method, can attend clear and certain knowledge without reference to experience (Omoregbe, *Knowing Philosophy*, 2018, p. 140). This position has the backing of Popkin and

Stroll who had previously called this theory 'rationalistic' due to the fact that their fidelity to a particular procedure of reason alone, one can attain knowledge in its strongest sense, a type of knowledge that cannot under any circumstances possibly be false. All rationalistic theories maintain that we cannot find any absolute certain knowledge in sense experience but have to seek for it only in the realm of the mind. It is again sustained that the only real and certain world is what is known through rationalistic procedures and all others known outside this realm are illusory or unreal or still, unimportant world (p. 203).

The rationalists develop their arguments in two ways. (a) They argue passionately that there are instances where our knowledge is not or cannot be explained by the senses of touch, sight, feeling, smell and hearing (b) They argue that at such lapses or deficiency, reason supplies what is lacking (Markie, 2004, August 19). To be identified as a rationalist, Markie asserts that one must accept one or all the following positions:

- a) Intuition or Deductive Argument: This is a form of rational insight which the rationalists defend and the possibility of reducing from what is known to be there already.
- b) Innate knowledge Argument: Knowledge coming as part of our nature.
- c) The Innate Concept Argument: Meaning that some of the concepts we use are derived from our rational nature and never from experience. These concepts are essential to the rationalists (Markie, 2004, August 19).

3.1 Arguments against Rationalism

It is clear that Empiricism emerged as a reaction against the position of the rationalists who still hold that innate knowledge is real and the only sure or certain source of knowledge. The skeptical opponents of the rationalists holds that, what the rationalists are offering the theory of knowledge as a source of knowledge is merely personal fantasies and mere beliefs taken much more seriously by those who held it. What they are talking about is neither visible nor tangible and the existence of such world and knowledge does not make sense for many except those who hold them, therefore, such world and knowledge are not real (Popkin and Stroll, 1993, p. 203).

The debate of the contemporary time made initial appearance and manifestation in the work of John Locke, namely, *Essay: Concerning Human Understanding*. The interest of Locke with this polemics was to discredit innatism and give credence to sense perception as the only true source of knowledge. Locke's arguments in debunking rationalism are in two folds (a) that their evidence or arguments were not arguments at all and (b) that even if they were granted for the

sake of argument, their own account (empiricist) was to be preferred since it was simple and in accord with experience. Locke's criticism is found in the Chapter II of his Essay. He criticizes the possibility of innate theoretical principles. This argument is captured in three sentences: (a) if in fact there are any innate principles, then everyone would assent to them (b) There are no innate principles that everyone assent to (c) therefore, there are no innate principles (Lock, 2020, November, 5).

His objection is based on the fact that there are no principles that enjoy universal acceptance. He supported his point with two philosophical principles (a) principle of identity which says that: what is, (b) the principle of non-contradiction which says, nothing can be and not be at the same time. For the idea of God he says it is unlikely to be innate, since many cultures in the world recognize no god (Lamprecht, 1956, p. 100-101). In all these Locks argument is simple, it is impossible for a thing to be in the mind without its being conscience of its existence.

Other criticisms have been advanced in recent times against rationalism. According to the empiricists, advancing on the argument simplicity introduced by Lock, William of Ockham has a principle in philosophy expressed in Latin thus: *Entia non sunt multiplicanda praeter necessitatem*. Meaning, "entities are not to be multiplied beyond necessity" (Mautner, 2015, p. 440). Using Ockham's Razor, Yount (2020, December 9) argues that when deciding between competing theories that explain the same phenomena, the simpler theory is better. Empiricism is simpler, therefore, it is the better theory. Again, Advancement in Science has added to the argument. Much of science is founded on empiricist principles, and would not have advanced without it. If we base our conclusions about the world on empiricism, we can change our theories and improve upon them and see our mistakes. The rationalists do not have this to offer.

4. Empiricism

The English term *empirical* is derived from the Ancient Greek word *ἐμπειρία*, which is a translation of the Latin *experientia*, from which the words *experience* and *experiment* are derived. In philosophy, the term is a theory that states that knowledge comes only or primarily from sensory experience (Mautner, 2015, p. 186). It is one of the outstanding themes in epistemology, and emphasizes the role of observable evidence in the formation of ideas. Empiricism has been identified with the "blank slate" concept- *tabula rasa*, which designates the fact that the human mind is "blank" at birth and develops ideas through experience alone. In the opinion of the empiricists, learning is observation based while perception and knowledge are not possible without experience.

Empiricism is a philosophical postulation which teaches that only or at least the most reliable source of human knowledge is experience, especially perception by

means of the physical senses. For them, knowledge is gotten through sense perception. This is a direct opposite of the rationalist school. They object to anything like innate ideas in the mind of man at birth and maintain that all knowledge and all ideas come from experience. Man is not born with any idea the human mind at birth is blank. They hold that all knowledge begin from experience and emphasize the indispensable role of sense experience as the foundation of knowledge (Omoregbe, 2018). There are three types of empiricism, namely, Classical, Radical and Moderate empiricism. Classical Empiricism states that there is no such thing as innate or in-born knowledge. Radical empiricism holds that our knowledge is solely on our senses. What is not experienced via our senses, exist not. They reject religious beliefs since they are not verifiable through the evidence of the senses. Moderate Empiricism maintains just as others that our experiences are founded on our senses; however, there are instances where our knowledge is not based on our senses. To this clause of moderation, they offer no explanation as to the alternative knowledge.

4.1 Weakness of Empiricism

The defenders of rationalism have also advanced very useful arguments against the empiricist and in support of rationalism. Mathematics and Logic are for instance inevitably Innate. They are true not because of our five senses, but because of reason's ability to connect ideas. Morality again is Innate: How do we get to know what is right or wrong, our five senses? No. We cannot experience things like justice, human rights, moral duties, moral good and evil with our five senses. What can the empiricists say about this? (Yount, 2020, December 9). There are other arguments that the empiricists have actually not been able to sustain with their doctrine of sense perception. For them it is only what has been experienced that can constitute knowledge. By implication, it means that knowledge will be relative. Relative in the sense that what one has not experienced does not exist or is not knowledge at all. This will introduce minimalism into the revered area of knowledge and minimize the scope of knowledge.

Perception is not universal, that is to say that what a person perceives as true can be false for another person. Again, perception is also affected by external factors: the same experiment under different conditions (temperature for example) can give different results, unbeknownst to the careless researcher. Age and health conditions can affect the way one perceives things (Tasos Vossos, 2020, November 1). In the classification of empiricism, moderate empiricism holds that our experience is founded on our senses; however, there are instances where our knowledge is not based on our senses. What is their true explanation to this? Are they now in support of rationalism? This seems to introduce division into their camp. The position that the mind is a *tabula raza* has not been favorable to the empiricists and their doctrine. It raises question of how one can have knowledge of what he has not seen or experienced before. For some who have not seen a lion before, they should not think of a lion existing. God has not been seen or experienced by the senses by anyone. How do they explain the existence of God?

For George Berkley, an Anglican Bishop and an empiricist, God exist; how did he genuinely come to the knowledge that God exist while he has not experienced him with his senses? They have to explain too, especially George Berkley, how abstract ideas exist, such as, (a) the idea of good (b) heaven (c) hell (d) world after this world, etc. How are general concepts possible too since we don't experience or see them? The word humankind exist yet we have not seen it, what we see are men and women (Martinich and Stroll, 2020, October, 12).

Another interesting answer still awaiting the empiricists to give is the explanation to natural law. It is a fact that there is a permanent underlining basis of all things. The Ancient Greece philosophers believe that there is a perfect justice given to humanity by nature which all positive laws should conform to as close as possible (Martin and Law, 2006, p. 351). This they call natural law, and refers to "the sum of those universally binding moral principles that can be discerned through reason" (Nwabude, 2008, p. 130). To deny this means that the empiricist do not believe in the law of nature and to believe in the law of nature and still deny the importance of reason is another disservice to knowledge.

5. Positive Values of Rationalism and Empiricism in Philosophy

Positive value in philosophy means constructive rather than destructive. It is applied to things or qualities which are good, desirable and worthwhile. In its nature, it gears towards what is good or laudable, progress, success, etc. Empiricism has always been recognized as an indispensable part of the scientific method. This is so because theories and hypotheses ought to be observed and tested in order to be considered correct. Empiricists argue that nothing can be known for certain and, therefore, they do not believe in dogmas or absolute truths. Both views, that is, empiricism and rationalism contribute immensely to the growth of philosophy in general and epistemology in particular.

Rationalism and empiricism are two distinct philosophical approaches to understanding the world around us. They are often contrasted with each other, as their approach to knowledge is completely different. Empiricists believe that we learn about our world through our previous experience, while for rationalists, reason is the basis of understanding anything. Both views can help someone attain knowledge ((Tasos Vossos, 2020, November 1).

Rationalism believes in the use of reason. It provides philosophy with the search for reason why objects exist or why certain things happen. For the rationalists, the fact that an object comes back to the ground when thrown upwards is not because a million people have observed so but because there is a reason for it to happen, that is, the law of gravity. Rationalism provides epistemology with deep knowledge and search for reasons in reality(Tasos Vossos, 2020, November 1).

Questioning the nature of things for authentication is one of the values of empiricism because it makes sure that philosophy does not accept anything such as dogmas. One of the benefits of empiricism to both philosophy and the theory of knowledge is that it is simple, real and practical. These are the characteristics of empiricism. This is so because it is not difficult to observe that cars use more fuel and energy to climb hills, infants grow to become adults and eventually die, objects thrown up will come down on its own, morning is followed by afternoon and then evening, etc. These are some of the things that we do not need extra grace and intelligence to interpret; they are observable, practical and easy.

6. Areas of Disservice

In Philosophy as a whole, service has been identified as helpful actions, actions performed to assist, lead toward a greater height or to contribute positively. Disservice on the other hand is understood and interpreted in many fronts as actions that cause harm or difficulty. O'Colins Gerald & Farugia Edward (2000) describes it in brief as "harmful action". Common areas that emphasize the division between rationalists and empiricists disservice includes:

6.1 Relativism

Sophists have generally been identified as the founders of relativism in Western philosophy. Indications of this emerged in the 5th century BC and Protagoras is said to have coined the phrase, "Man is the measure of all things: of things which are, that they are, and of things which are not, that they are not." Plato popularized this term in a paraphrase from his dialogue *Protagoras*: "What is true for you is true for you, and what is true for me is true for me" (William and Lewis, p. 28). Roughly put, is the view that truth and falsity, right and wrong, standards of reasoning, and procedures of justification are products of differing conventions and frameworks of assessment and that their authority is confined to the context giving rise to them (Baghranian and Carter, 2020, 15th November).

Relativism belongs to the family of philosophical views that negates objectivity and holds that facts are not absolute but relative to the persons or groups that are holding them. The summary of it is that there are no absolute truths and values; they are determined by periods, cultures, societies and persons (O'Colins & Farugia, 2000. p. 224). To believe in relativism means that various people can have diverged opinions about issues and it is correct for them. Simply put, relativism can be understood in this philosophical saying "different strokes for different folks. This is the idea that what is good or bad, right or wrong, true or false, is so for different people". Relativism in all its strands is the denial of absolute truth. Things are true to individuals or cultures based on their perspectives. This is already a weak spot on the theory of knowledge in particular and philosophy in general. If what is true for Mr. A is not true for Mr. B, or what is true in one culture is not in another, can we truly say that we know?

6.2 Disparity among Epistemologists

Acquisition of knowledge has been the focus of philosophers and the contention among epistemologists. From the time of the Ionian fathers, philosophers were out to discover the constitutive element of things. The emergence of the Sophists gave birth to epistemology, where the focus was changed from cosmology to man and the society (Omogbe, 2017, p. 60). The primary mission of Epistemologists has been to unravel the secrets of knowledge, to make knowledge available and accessible to all. In doing this, they follow different paths and these paths ultimately ought to lead to the same destination, namely, knowledge/wisdom. The treatment of each adherent of the opposing side and position as meaningless and unimportant creates a bigger problem, that is, a division among people who are out to solve the same problem. The challenge is, if we cannot get people who are trying to lead us to true knowledge to unite, what will be the value of what they are teaching? If they discredit others, how can they sustain their veracity?

6.3 It Demeans Creativity

To demean is to undermine the status, dignity or value of something. Creativity has been encouraged in all areas of life as the capacity to invent or create something. It is often a brain work and a result of deep reflection. It is true that there could be instances where senses come to help but a greater percentage of assistance will always come from the use of reason otherwise it will not be called creativity. The separation of the two sources of knowledge will definitely undermine the power of creativity. Exclusive empiricism is a disservice to epistemology as it denies the effort to invent. Again, it presents humans as incapable of reasoning. This makes it appear as if they can only receive what they experience, therefore, are fully controllable and manipulatable. This is made possible by the claim that it is only what we see that works therefore we rely only on what we see and not what we can reason out. This limits our knowledge in the first place, clampdown on us in our effort to reason out of our problems. That is to say, therefore a solution that has not been experienced or known through the senses does not exist.

7. Conclusion

The controversy has been between the Rationalist claiming that knowledge is innate and the Empiricists claiming that knowledge is derived from experience or sense perception of touch, smell, sight, feeling and hearing. However, the innate idea and the sense perception experience are valid ways of gaining knowledge. If any is taken as sacrosanct and the other discarded, true knowledge may not be achieved. In our view, both schools are complementary. There are no exhaustive arguments to show that there are no innate ideas and there are no exhaustive arguments to show that we cannot gain knowledge through experience.

Therefore, we have to be cautious with the way we stretch either side so as not to fall into skepticism as both the empiricists and the rationalists have tried to by denying the existence of others. Certain ideas are innate and knowledge can also be gained through the senses, however, we must be careful since the senses are not static, they change. Our sense of perception can also be deceptive depending on our state of mind. Finally, we need the senses and we need our reason to be relatively sure of what we know. The combination of these with proper interpretation and understanding, gives adequate and true knowledge, after all, two good heads are better than one. Rationalism is a good head, Empiricism is a good head, let us use them well for the sake of knowledge.

References

- Agede, A. K. (2019) "Branches of Philosophy" in Agundu, T. O. (Ed.), *Critical Issues in Philosophy, Logic and Human Existence*. Abuja: DonAfrique Publishers.
- Akpen, T.T. (2018) "The Main Branches of Philosophy" in Ihuah, A.S (Ed.), *Philosophy and Logic for Beginners*. Makurdi: Obeta Continental Press.
- Baghrmian, Maria and Carter, A. J. (2020, November 15) "Relativism" Edward N. Zalta (Ed.), *The Stanford Encyclopedia of Philosophy* (2020 Edition), <https://plato.stanford.edu/archives/fall2020/entries/relativism>.
- Bruce Anne. *An Empiricist Theory of knowledge*. Revised 3/11/2009.
- Essien Augustus (2019) "Philosophy as the Servant of Truth and Justice" *Philosophy and Praxis: Journal of the Nigeria Philosophical Association* (NPA) Vol. 9., 53-67.
- Everit , N. and Fisher, P. (2002) "The Analysis of Knowledge" in Michael Huemer (Ed.), *Epistemology: Contemporary Reading*. London: Routledge.
- Kenny, A. (2004) *Ancient Philosophy*. Oxford: Clarendon Press.
- Lamprecht, Sterling P. (1956) *Locke Selections*. New York: Charles Scribner's Sons.
- Lock, John. (2020, November 5) "Essay Concerning Human Understanding." <https://www.sparknotes.com/philosophy/lockessay/section2>.
- Markie, P. (2020, December 9) "Rationalism vs. Empiricism." Retrieved from <https://plato.stanford.edu/entries/rationalism-empiricism>.
- Martin and Law, (Ed.) (2006) *A Dictionary of Law*, (6th Edition). Oxford: Oxford University Press.
- Martinich and Stroll. (2020, October 12) "Epistemology: Philosophy" Retrieved from <https://www.britanica.com>.
- Mautner, T. (2005). *Dictionary of Philosophy*, (2nd Edition). London: Penguin Books.

- Nwabude, E. (2008) *An Encyclopedic Dictionary of Canon Law of the Western (CIC 1983) Church and Western (CCEO 1990) Churches*. Onitsha: Africana.
- O'Colins, G. & Farugia E. (2000) *A Concise Dictionary of Theology*. New York: T&T Clark.
- Omoregbe, J. (2018) *Knowing Philosophy*. Lagos: Joja Educational Research and Publishers.
- _____ (2017) *Epistemology, Theory of Knowledge: A Systematic and Historical Study*. Lagos: Joja Educational Research and Publishers.
- Popkin Richard and Avrum Stroll (1993) *Philosophy Made Simple*, (2nd Edition). New York: Three Rivers Press.
- Tasos Vossos. (2020, November 1) "Advantages & Disadvantages of Rationalism & Empiricism." Retrieved from <https://classroom.synonym.com/advantages-disadvantages-positivism-12088541.html>.
- Udoidem, S. I. (1992) *Understanding Philosophy*. Lagos: African Heritage Research and Publications.
- William S. S. and Lewis, M. S.(1993).*Ideas of The Great Philosophers*. Barnes & Noble Publishing.
- Yount, D.J. (2020, December 9) "Empiricism V. Rationalism." Retrieved from <https://www.mesacc.edu/~davpy35701/text/empm-v-ratm.html>.