

AN EVALUATION OF IMMANUEL KANT'S CRITICAL RESPONSE TO THE EXTREME POSITIONS OF RATIONALISM AND EMPIRICISM ON THE ISSUE OF KNOWLEDGE

ANETOH, BONAVENTURE CHIKE, Ph.D.

(Department of Philosophy and Religious Studies, Tansian University, Umuoya)

Email: anetohbonaventure@yahoo.com

Abstract

This article focuses on an evaluation of Kant's critical response to the extreme positions of rationalism and empiricism on the issue of human knowledge. The issues of the source and justification of knowledge are controversial issues among epistemologists. Rationalism upholds the existence of innate ideas and insists that reason alone is the source as well as the justification of human knowledge. On the other hand, empiricism denies the existence of innate ideas and insists that sense perception or experience is the source as well as the justification of human knowledge. This article, employing analytical method, examines Kant's critical response to the extreme positions of rationalism and empiricism. The researcher agrees with Kant that both sense perception and reason play indispensable as well as complementary roles in the acquisition of knowledge and thus, knowledge is not a product of either experience or reason alone. Kant deserves commendations for responding profitably to the epistemic battle between rationalism and empiricism. However, the researcher is not comfortable with Kant's partial scepticism by insisting on unknowability of the noumena (things in themselves). Despite the shortcomings of Kant's ideas, his critical response to the extreme positions of rationalism and empiricism on the issue of knowledge is a landmark in the history of western philosophy. His ideas are epistemologically interesting and very enriching.

Keywords: Kant, Rationalism, Empiricism, Knowledge

INTRODUCTION

The problem of human knowledge is one of the fundamental issues in philosophy. Particularly, questions concerning knowledge are the major objects of enquiry in Epistemology. The issues of the source, validity and justification of human knowledge have received great attention from epistemologists, and such issues have generated a lot of controversies among them. This is as a result of the divergent views on the source, validity and justification of human knowledge. The problem of human knowledge seems to be a perennial epistemological problem. However, the search for rational justification of human knowledge received a very serious attention in the modern period of philosophy, around 17th and 18th centuries during the period of

Continental Rationalism and British Empiricism. Hence, Rationalism and Empiricism became the two major conflicting orientations or schools of thought on the source and justification of human knowledge. In the words of Ozumba (2001):

There are two main sources of knowledge, that is, the senses and reason. These sources are represented by schools of philosophy called empiricism and rationalism respectively. This means that knowledge comes from what we experience or what we reason out. Every other form of knowledge whether inferential, mystical or revelational, intuitive, conceptual, etc, are subsumable under either of the two sources. (p.49)

Each school of thought upholds a different and conflicting epistemological thesis. Anetoh (2018) notes that: “The points of disagreement and divergence between these two schools of thought are basically on the existence or non existence of innate ideas as well as whether it is reason or sense perception that guarantees certain knowledge.”(p.213) This controversy created an epistemological battle in the modern period of philosophy. According to Eboh (1995): “In a sense, one can say that the spiritual climate and mental background of the 17th century was the basis of the battle between rationalism and empiricism.”(p.55)

Both Rationalism and Empiricism upheld extreme positions on the issue of knowledge. Rationalists like Rene Descartes, Benedict Spinoza, and Gottfried Wilhelm Leibniz insist that reason is the source and justification of certain knowledge. Rationalism does not give recognition to the role of sense perception in the acquisition of certain knowledge. On the other hand, British empiricists like John Locke, George Berkeley and David Hume insist that sense experience is the source and justification of objective knowledge. Empiricism does not recognize human reason as the true source of objective knowledge. The epistemological theories of rationalism and empiricism provided the intellectual background for Kant’s critical philosophy. Hence, Kant criticized their extreme positions on the issue of human knowledge, and as well undertook a critical mediation between them.

Immanuel Kant, in his critical philosophy, curbed the excesses of both rationalism and empiricism. He partially agrees with rationalism that reason is capable of knowledge. However, he rejects the rationalistic claim that pure reason can have certain knowledge of things in themselves. Also, Kant accepts the claim of empiricism that the process of knowledge acquisition can start from experience, but rejects the claim

that knowledge ends with sense-experience. Hence, Kant's critical response to the extreme positions of rationalism and empiricism on the issue of knowledge forms the basic object of inquiry in this article.

THE MAJOR TENETS OF RATIONALISM ON THE ISSUE OF KNOWLEGDE

It is quite necessary at this juncture to examine the major tenets of rationalism as an epistemological theory. This is due to the fact that the major object of inquiry in this article is Kant's critical response to the extreme positions of rationalism and empiricism on the issue of knowledge. Examination of the basic tenets of rationalism throws light to the discourse in this article and places Kant's critical response in its proper perspective.

As already demonstrated in this article, rationalism is one of the major perspectives or schools of thought on the source and justification of human knowledge. Rationalism could be said to have started in the ancient period of philosophy. One can easily recall that Plato in the *Republic* made a distinction between opinion and real knowledge (episteme), and argued that the senses can only give us opinions, while real knowledge is attained through reasoning or thinking. One can easily observe Plato's rationalistic approach to knowledge. Hence, through reason, one can grasp the reality in the world of forms. However, rationalism as an epistemological theory was given great attention in the modern period of philosophy by the Continental rationalists headed by Rene Descartes. Other continental rationalists are Benedict Spinoza and Gotfried Leibniz.

Rationalism as an epistemological theory rejects sense experience as the major source of human knowledge and upholds reason as the only source and justification of certain and objective knowledge. Elaborating on this, Ozumba (2001) states:

Rationalism is the school of thought that holds that knowledge is derived through logico-mathematical reasoning. The continental rationalists include Rene Descartes, Benedict Spinoza and Gotfried Leibniz. These three are united in their belief that knowledge comes not from experience but from a mental process that is intuitive and deductive.(p.50)

Thus, rationalism insists that through reason alone, one can attain knowledge of all realities. There is no limit with regard to the knowledge human reason is capable of attaining.

An essential aspect of the tenets of rationalism as an epistemological theory is the belief in the existence of innate ideas. In the ancient period of philosophy, Plato described the process of knowledge as reminiscence. This entails recollecting the ideas in the world of forms. The implication of this is that those ideas have been existing somewhere. This is the whole issue of the theory of innate ideas. The continental rationalists uphold the existence of innate ideas. Ozumba (2001) states that:

They hold that there are certain innate principles that exist prior to experience. Experience only confirms their reasonableness and logicity and is in no way responsible for their existence. For example, we have the fundamental laws of thought, like the law of identity, the law of contradiction and the law of excluded middle. These laws are true and independent of our experience of them. All mathematical axioms are taken to be true. They are accepted not experienced and are only proved using deductive procedures. The rationalist philosophers hold to the view that the mind has innate powers that unravel these independent truths without necessary experiencing them. (pp.50-51)

It ought to be noted that the issue of the existence or non-existence of innate ideas is one of the major points of controversy between rationalism and empiricism. In the words of Eboh (1995) "...rationalists maintain that the only way to true knowledge is reason which possesses innate ideas of all reality. (p.6) The implication of this is that knowledge, for the rationalists, is completely 'a priori' such that it is not in any way derived from experience.

As was earlier stated in this article, Rene Descartes is the leader of the continental rationalists. Hence, it seems to the researcher that a brief analysis of his rationalistic views will enhance one's understanding of the tenets of rationalism as an epistemological theory. As a rationalist, Rene Descartes has no doubt that it is only reason that guarantees certain and indubitable knowledge of all realities. He was certainly convinced that the senses can deceive us, and he completely distrusted sense perception as a means of acquiring certain knowledge. In his epistemology, using the power of unaided reason, he adopted the system of 'Methodic doubt'. This enabled him to doubt everything until he arrived at what he considered as a self-evident or indubitable truth which is 'cogito ergo sum' (I think therefore I am). He was able to arrive at this indubitable truth through unaided power of reason. The other continental rationalists, Spinoza and Leibniz also uphold the existence of innate ideas and

maintain that reason alone guarantees objective knowledge.

At this point of the discourse, it is obvious that the major tenets of rationalism as an epistemological theory are quite very clear. They revolve around the belief in the existence of innate ideas and the belief that it is only reason that necessitates certain knowledge which makes human knowledge to be completely ‘a priori’.

THE MAJOR TENETS OF EMPIRICISM AS AN EPISTEMOLOGICAL THEORY

Empiricism is the opposing school of thought to rationalism on the issue of human knowledge. Etymologically, the term ‘empiricism’ was derived from the Greek word ‘εμπειρις’ (empeirismos) which was translated into Latin language as ‘experientia’. The Latin word ‘experientia’ is translated into English language as ‘experience’. Thus, from etymological perspective, empiricism has to do with experience.

Empiricism is an old epistemological system. In the ancient period of philosophy, the sophists rejected the claims of pure reason, and saw man and society as the major objects of philosophical investigation. Aristotle, an ancient philosopher, was an empiricist. According to Anetoh (2018):

Just like rationalism, empirical attitude to knowledge can be traced back to the ancient period of philosophy. In *De Anima*, Aristotle argues that knowledge basically comes through the senses, and that ‘there is nothing in the intellect which was not first in the senses’. The implication of this is that sense perception is the source of all the ideas in the human mind. In the medieval period, Thomas Aquinas, who was mainly Aristotelian in approach, developed the empirical theory of Aristotle. (p.214)

This goes a long way to prove the fact that empiricism is an old epistemological system, and its major claim is that knowledge comes through sense perception. Empiricism, as an epistemological theory, is a reaction against rationalism. It is the school of thought which claims that experience is the source and justification of human knowledge. In the words of Ozumba (2001):

Empiricism is the philosophical school of thought that holds that our knowledge comes from the senses- notably; the five sense (sic) – the

sense of touch, sight, hearing, tasting, and smelling. These are the windows through which the mind receives information about the external world. (p.49)

Obviously, one cannot properly discuss empiricism as an epistemological theory without making reference to British Empiricism. In fact, it was during the period of British Empiricism, precisely in the modern period of philosophy, that empirical approach to knowledge received a very serious as well as remarkable attention. It was also during the same period that empiricism became well developed as an epistemological theory. The three notable British empiricists are John Locke, George Berkeley and David Hume. They reacted against the claims of rationalism by rejecting the existence of innate ideas and insisting that knowledge basically comes from experience. Thus, empiricism rejected the rationalistic claim that reason is the source and justification of certain as well as objective knowledge. For British empiricists, knowledge is fundamentally ‘a posteriori’ (derived from experience). Eboh (1995) articulates the view of British empiricists thus: “They will insist with the scholastics that “Nihil est in intellectu quod non prius fuerit in sensu” (There is nothing in the intellect which was not first in the sense).”(p.58) The implication of this is that whatever goes by the name ‘human knowledge’ must have ‘sense perception’ or ‘experience’ as its basic source and justification.

In order to throw more light on the tenets of empiricism as an epistemological theory, there is need to examine very briefly the views of some British empiricists. John Locke rejected strongly the claims of rationalism, and argued that human ideas come from sensation or reflection. Experience, for him, is quite indispensable in the attainment of genuine knowledge. He described the human mind before experience as just ‘tabula rasa’ (blank slate). Thus, he denied the doctrine of innate ideas and developed serious arguments against the existence of innate ideas. On his part, George Berkeley argues that existence is dependent on perception, and so whatever that is not perceived does not exist. He articulated his empirical theory in his famous theory of ‘esse est percipi’ (to be is to be perceived). Also, David Hume is a thorough going empiricist. He distinguished between impressions and ideas. Impressions are the original and vivid perception, while ideas are copies of impressions. Hence, every idea must have a corresponding impression. He denied completely the knowledge of anything that cannot be subjected to the principles of empiricism. Thus, any knowledge that is not empirically verifiable becomes non-sensical. Ozumba (2001) analyses Hume’s empirical theory thus:

For David Hume, his motto is “show me the impression”. He talks of the direct object of perception as representing the true token of reality. All the materials of knowledge no matter how fantastic they may be must be traceable to experience or else they are mere phantoms and fabrications of the mind. Ideas which are regarded as the faint copies of impressions are taken seriously if they derive from a clear impression, otherwise, they are chimerical. (pp.49-50)

An essential aspect of Hume’s empirical theory is his critique of causality and metaphysics. He criticized metaphysics because metaphysical propositions, for him, are not empirically verifiable. According to Hume (1952):

If we take in our hands any volume of divinity or school metaphysics for instance, let us ask, does it contain any experimental reasoning concerning matter of fact and existence? No. Commit it then to the flames for it can contain nothing but sophistry and illusion. (p.509)

From the foregoing, it is obvious that all the British empiricists are quite together in denying the claims of rationalism and in asserting that experience or sense perception is the source and justification of certain knowledge.

Serious and concerted effort has been made in this article to analyse the tenets of rationalism and empiricism on the issue of knowledge. It is obvious from the discourse that each upholds extreme positions in this regard. Such extreme positions necessitated Kant’s critical response.

IMMANUEL KANT’S CRITICAL RESPONSE TO THE EXTREME POSITIONS OF RATIONALISM AND EMPIRICISM ON THE ISSUE OF KNOWLEDGE

The extreme positions of rationalism and empiricism on the source and justification of human knowledge provided a fertile background for Immanuel Kant’s critical philosophy. Kant’s critical philosophy is a critical reaction against such extreme positions, and at the same time a critical mediation between them.

As was already demonstrated in this article, rationalism upholds the existence of innate ideas and insists that reason alone is the source and justification of objective knowledge. It is obvious that rationalism maintains an extreme position by denying the role of experience in knowledge acquisition and by insisting that reason alone can attain objective knowledge of all realities. Kant reacted critically against such extreme

position. Hence, he agrees partly with rationalism that reason is capable of knowledge but rejects the claim that pure a priori knowledge is possible. Kant rejects the rationalists' claim that reason can attain certain knowledge of the 'transcendent' and 'noumenal' entities. He insists that reason can attain certain knowledge only within the bounds of possible experience. On the other side, empiricism denies the existence of innate ideas and claims that experience alone is the source and justification of objective knowledge. It is also clear that empiricism upholds extreme position on the issue of knowledge by denying the role of reason in the cognitive process. Such gave rise to Kant's critical response. Kant partly agrees with empiricism that our knowledge begins with experience, but rejects the empiricists' claim that all knowledge arises out of experience. Elaborating on this, Kant (1990) states:

That all our knowledge begins with experience, there can be no doubt... But, though all our knowledge begins with experience, it by no means follows that all arises out of experience. For, on the contrary, it is quite possible that our empirical knowledge is a compound of that which we receive through impressions, and that which the faculty of cognition supplies from itself... (p.1)

It becomes obvious from Kant's stipulation that though knowledge begins with experience, it does not just end with experience. This implies that experience alone cannot guarantee objective knowledge of all realities. Thus, empiricism is wrong by claiming that it is only experience that guarantees certain knowledge. Analysing Kant's idea, Ozumba (2001) states:

It took an Immanuel Kant to proffer a mediative theory between these extreme views of empiricism and rationalism. Kant through his synthesis of sensibility and understanding was able to show that though all knowledge come from experience, but they do not all arise from experience. The senses supply the raw data, then, the mind supplies the forms and synthesizes (unifies) our experience. This helps us to get the fruit of knowledge as a product of the cooperative activities of the mind and the senses. This means that the empiricists and the rationalists were all partially right. (p.52)

For Kant, both experience and reason play indispensable and complementary roles in the attainment of certain knowledge. In fact, Kant identified three major faculties that are responsible for objective knowledge. They include: 'senses', 'understanding' and 'reason'. These three faculties play indispensable roles in the attainment of genuine

knowledge. The process is from the senses to the understanding and finally to reason. Every genuine knowledge ought to follow such process. In the words of Kant (1990):

All our knowledge begins with sense, proceed thence to understanding, and ends with reason, beyond which nothing higher can be discovered in the human mind for elaborating the matter of intuition and subjecting it to the highest unity of thought.(p.189)

From the foregoing, one can see that empiricism erred by emphasizing sense perception alone, while rationalism erred by emphasizing reason alone. In Kant's theory of knowledge, there is the interplay of both sense perception and reason in the attainment of genuine knowledge. Kant explains further that what one originally receives from sense perception is 'a posteriori', while what the faculty of cognition supplies from itself is 'a priori'. The implication of this is that human knowledge is a compound of both of them. It is not totally 'a priori', as rationalism claims. At the same time, it is not totally 'a posteriori', as empiricism claims. The synthesis of the contributions of empiricism and rationalism is quite necessary for the attainment of genuine knowledge.

Kant buttressed his point further by undertaking a critical analysis of the nature of human knowledge. He made a distinction between synthetical judgement or proposition and analytical judgement or proposition. Synthetical judgement is augmentative because the predicate gives new information about the subject, while in analytical judgement/proposition, the predicate does not give new information about the subject, and it is explicative. Furthermore, Synthetical judgement or proposition is 'a posteriori' because it is dependent on experience and so, it is not necessarily true and can be contradicted by experience. On the other hand, analytical proposition is 'a priori' (not derived from experience), and so it is necessarily true and cannot be contradicted by experience. Kant (1990) explains what he means by 'a priori' and 'a posteriori' knowledge thus:

By the term 'knowledge a priori, therefore, we shall in the sequel understand, not such as is independent of this or that kind of experience, but such as it absolutely so of all experience. Opposed to this is empirical knowledge, or that which is possible only a posteriori, that is, through experience.(p.2)

However, besides the analytic ‘a priori’ and synthetic ‘a posteriori’ judgements, Kant argued for the possibility of ‘synthetic a priori’ judgement/knowledge. The combination of synthetic and a priori elements seems to be abnormal. Nevertheless, this is actually Kant’s remarkable and significant contribution to philosophy in general and epistemology in particular. Synthetic a priori’ judgements “are universal judgement which are based on the categories and apply to the world of experience—that is, to empirical phenomena in space and time.” (Kant, 1950, p.xvii) This is a novel idea in epistemology. In the words of Bluemink (2015): “...the basic task of Kant’s Critique of Pure Reason was to show how synthetic a priori propositions are possible, this was the foundation upon which Kant built his whole transcendental philosophy.” (par. 5) Bluemink (2015) goes further to argue that:

...Kant’s idea of synthetic a priori is hugely significant for his philosophy as a whole. It provides the essential bridge between rationalist and empiricist epistemology and in doing so gives probably the best account for the plausibility of metaphysical knowledge that sceptics like Hume had repudiated. (para.8)

Kant argues that synthetic a priori judgements are possible in mathematics as well as natural science. According to Kant (1990):

Mathematical judgments are always synthetical ...Before all, be it observed, that proper mathematical propositions are always judgments a priori, and not empirical, because they carry along with them the conception of necessity, which cannot be given by experience. (p.9)

He insists that though our knowledge are related to experience, some parts of our knowledge are prior to experience. In order to prove the possibility of synthetic a priori knowledge, Kant argues that it is the objects of knowledge that conform to the structure of the human mind. Thus, it is not the human mind that conforms to the objects of knowledge as it was assumed traditionally. Thus, the mind is not a passive receptor of stimuli from the external world. Rather, it plays active role by restructuring or reshaping the stimuli from the external world. The implication of this is that it is our mental faculties that determine the shape of our knowledge because. Kant reversed our understanding about the relationship between the knowing subject and the object of knowledge, and claims to have carried out Copernican Revolution in Epistemology. Hence, we do not know things as they are in themselves (noumena) but rather as they

are represented to us by our mental cognitive faculties (phenomena). The noumena are completely unknowable.

As earlier stated in this article, Kant maintains that knowledge begins from the sense, proceeds to understanding and ends with reason. In order to understand the nature and process of human knowledge from Kant's perspective, 'Sensibility', 'Understanding' and 'Reason' have to be properly elucidated.

Sensibility entails sense perception in 'space' and 'time'. Space and time are the two 'a priori' forms of sensibility. Objects are perceived in 'space' and 'time'. For Kant, 'space' and 'time' exist in the mind as pure concepts of sensibility and act as the subjective condition of sensuous intuition. Thus, we can only perceive things in space and time.

Sensibility furnishes information to the faculty of 'understanding'. Sensibility works hand in hand with Understanding which is the faculty of 'thought' or judgement. Understanding thinks on, and synthesizes the objects of sensibility through the 'categories' which are the a priori principles of understanding. The categories consist of four classes, and each of the four classes is further divided into three, thus making the categories to be twelve in number. The twelve categories of Kant include: (a) Quantity (unity, plurality and totality) (b) Quality (reality, negation and limitation) (c) Relation (inherence and subsistence, causality and dependence, community) (d) Modality (possibility-impossibility, existence- non-existence, and necessity-contingence). Kant argues that the categories can only be applied to phenomena (things as they appear to us) but cannot be applied to the noumena (things in themselves).

The next cognitive faculty, according to Kant, is reason, which is the highest cognitive faculty. Just as sensibility furnishes information to understanding, the faculty of understanding furnishes information to reason. Kant argues that there is a strong relationship between reason and understanding. Reason works in connection with the faculty of understanding and gives unity 'a priori' to the cognitions of understanding by means of conceptions. For Kant, reason does not have immediate relation to objects of experience. It relates immediately to the 'understanding' through which it can be employed to the objects of experience. This agrees with Kant's assertion that knowledge begins from the senses, proceeds to understanding and ends with reason.

This highlights Kant's critical response to the extreme positions of rationalism and empiricism on the issue of human knowledge. This is as a result of the fact that both experience and reason play indispensable roles in the attainment of genuine knowledge. Kant insists that reason can attain objective knowledge only within the bounds of possible experience. It cannot attain certain knowledge of the noumenal and transcendent entities. Here, Kant identifies the limits of reason as a cognitive faculty. Any attempt to extend human reason to noumenal and transcendent entities leads reason to illusions which Kant describes as conceptions of pure reason. Such conceptions of pure reason are mere 'ideas'.

EVALUATION AND CONCLUSION

The researcher has tried to examine Kant's critical response to the extreme positions of rationalism and empiricism on the issue of human knowledge. Rationalism upholds the existence of innate ideas and argues that reason is the source and justification of human knowledge, while empiricism denies the existence of innate ideas and argues that sense-perception is the source and justification of human knowledge. Kant responded critically to them, criticizing their extreme positions. He made it clear that both experience and reason play vital and complementary roles in the attainment of human knowledge. Obviously, the researcher agrees with Kant that genuine human knowledge is a product of complementary as well as indispensable roles of both experience and reason. Hence, through this critical response to the extreme positions of rationalism and empiricism as well as the consequent critical mediation between these two conflicting schools of thought, Kant seems to have resolved the epistemic battle between them. He eliminated the shortcomings and faults of both orientations. His critical philosophy brought to an end the long and controversial debate between rationalism and empiricism on the source of human knowledge. This earned Kant a very unique and special position in the history of philosophy in general and epistemology in particular.

However, just like every other philosophical endeavour, Kant's ideas have been subjected to severe criticisms. The most criticised aspect of Kant's idea seems to be his idea of the noumena. In the bid to curb the excesses of rationalism, Kant argues that human knowledge is limited to phenomena (things as they appear), while the noumena (things in themselves) remain unknowable. Such idea has been a source of worry for some scholars. Stumpf (1994) argues thus:

Now with his doctrine of the thing-in-itself, Kant appeared to have retained just what his critical philosophy was supposed to eliminate. Not only is it impossible, on Kant's terms, to ascribe the category of existence to the thing-in-itself, it is also a clear contradiction to say that there can be something in existence that is unknowable...But to say that something is unknowable is contradictory, because such a statement implies that we already know.(p.328)

It is quite irreconcilable to assert that something exists and at the same time claim that such thing is unknowable.

Furthermore, some scholars including the researcher argue that Kant ended up in partial scepticism by insisting on unknowability of the noumena. Such is an uncomfortable position, and at the same time leaves much to be desired.

It seems to the researcher that despite the criticisms, Kant deserves commendations because of his unique and remarkable contributions in philosophy, precisely in epistemology. He curbed the excesses of rationalism and empiricism. Rationalism seems to over emphasize the role of reason, while empiricism seems to over emphasize the role of experiences in the attainment of knowledge. His critical response to the extreme positions of rationalism and empiricism on the issue of knowledge is a landmark in Epistemology. His ideas are epistemologically interesting and enriching.

References

- Anetoh, B. C. (2018). 'Knowledge and human mind: An analysis'. In Izibili, M. A, Isanbor, P. O. & Attah S. U. (eds.) *Studies in philosophy and society*, vol.1(pp.207-220), Jos: Eiswa Press Ltd.
- Bluemink, M. (2015). *The Importance of the synthetic a priori in Kant's first critique*, retrived from: <https://bluelabyrinths.com/2015/01/12/the-import> (30/03/2020)
- Eboh, B.O. (1995). *Basic issues in theories of knowledge*. Nsukka: Fulladu Publishing Company.
- Hume D. (1952) 'An enquiry concerning human understanding'. In Robert Maynard Hutchins (ed.) *Great books of the western world*. Chicago: Encyclopedia Britannica, Inc.
- Kant, I. (1990). *Critique of pure reason*, J.M.D. Meiklejohn, (trans.) New York: Prometheus Books.
- (1950). *Prolegomena to any future metaphysics*. Lewis White Beck (trans.) New York: The Bobs Merrill Company, Inc.
- Ozumba, G.O.(2001). *A concise introduction to epistemology*. Calabar: Ebenezar Printing Press.
- Stumpf, S.E. (1994). *Philosophy: History and problems*, 5th Ed. New York: McGraw-Hill Inc.