JSSH (Jurnal Sains Sosio Humaniora)
Vol. 7(2), 2023
https://online-journal.unja.ac.id/jssh
e-ISSN: **2580-2305;** p-ISSN: **2580-1244**

An Investigation of the Dominant Theoretical Assumption in Epistemic Analysis of Some Systems of Knowledge

Akpan[1], Etorobong Godwin[2]

[1] *Akpan University of Port Harcourt.*
[2] *Etorobong Godwin. University of Port Harcourt. e-mail:* etorobong.akpan@gmail.com

ARTICLE INFO

Keywords:
epistemic, metaphysics, physics, logic, mathematics, autocracy.
DOI:
http://dx.doi.org/10.22437/jssh.v7i2.21029

Received:
October 13, 2022

Reviewed:
December 3, 2023

Accepted:
December 4, 2023

ABSTRACT

An investigation into the epistemic analysis of some systems of knowledge was carried out. The aim of the project was to delineate the dominant theoretical assumption that guides epistemic analysis in these subjects of study. To achieve the objective, the method of content analysis was adopted for the study. The analysis was able to demonstrate that the dominant theoretical assumption guiding epistemic programmes in the selected systems of knowledge is the presupposition of the validity of absolute objective standpoint, which berates the inputs of the cognitive subject to knowledge claims.

1. Introduction

Every system of knowledge is believed to be founded on some dominant theoretical assumption, explicitly stated or not. Such an assumption conditions the features of the theory of the system. For instance, the belief in the validity of positivism is one assumption that has conditioned the growth and legitimacy of scientific knowledge. Scientific knowledge is therefore believed to arise completely from experience. The same thing could not be said of religious knowledge, which is dominantly believed to have originated from some supra-human revelations. An interesting fact about this explanation is that the so-called dominant assumptions are not always evident in the statements of these knowledge claims. It is the vagueness of the underlying presupposition(s) of a theory that makes epistemology as a discipline necessary.

Epistemology is concerned with the foundations of knowledge (Quine, 1969). In its preoccupation with the foundations of knowledge, epistemology has as its object the identification of all the inputs that are responsible for a specific knowledge claim or proposition. Epistemology investigates the theoretical presupposition(s) or assumption(s) that underpin any knowledge claim in this way. As an investigator of the foundations of knowledge, epistemology is not a science but a normative discipline. Hence, its objective is not simply a theory of the foundations of knowledge claims, but equally an arbiter of validation or denial of legitimacy to knowledge claims. In its normative essence, epistemic analysis is conducted with presupposed theoretical assumptions concerning what should constitute a legitimate knowledge claim. Such theoretical assumptions cut across all departments of epistemic analysis. Consistency through all departments of knowledge

is necessary because the goal of epistemology is to discover that truth which is so certain that no one can doubt it.

The dominant guiding principle in epistemic analysis, which is assumed to be the thesis of this essay, is the belief that all legitimate knowledge claims arise from the cognitive object and that their justifications can thus be completely satisfied by the presentation of such an object. This assumption is here referred to as the absolute objective standpoint or cognitive autocracy of the object or the totalitarianism of the object. To demonstrate the veracity of the thesis, four areas of epistemic analysis have been chosen for investigation. They include, the foundations of metaphysics, the foundations of physics, the foundations of logic and the foundations of mathematics. The systems were chosen randomly without any particular condition in mind. The method adopted for the study is content analysis. The major sources of data are the writings of philosophers on epistemic analysis.

2. Epistemic Analysis of Metaphysics

The critique of knowledge is a judgement exercise. Like all judgments, the exercise is based on a standard of legitimating or invalidating. The establishment of standards is anterior to the critique. The standard fixed by traditional epistemology is the absolute objective standpoint or the cognitive autocracy of the object. This standard of legitimating permeates all branches of epistemic analysis. Thus, it explains the description of epistemology as a normative discipline. Even very young epistemologists under research training feel that they know the legitimate foundations of science in general and thus saddle themselves with the responsibility of critiquing all scientific output on the basis of an absolute objective standpoint.

The cognitive autocracy of the object affects all sciences, including metaphysis. The responsibility of man to make intelligible every piece of data of everyday experience is a call to metaphysics. Metaphysics is the science of being as being or being in its beingness. In their beingness, all beings are substances. Thus, metaphysics is the science of substance. The claim to possess knowledge of substances has been met with various controversies in the history of epistemology. The Socratic search for essence was the search for substance. Plato's disciple of Socrates, Plato was to objectify substance in the ideal world (Stumpf, 1982, p.56). Aristotle was actually the one who made metaphysics a science. The reality of substance was situated in the world of experience and was only later abstracted by the knowing mind. Thus, in his categories of being and knowing, Aristotle made substance "what is identified about or what is described in speaking" (Evans, 1987, p.50). The idea of something possessing a predicate is ontological. Thus, the foundation of metaphysics is absolutely the empirical world. Such autocracy of the object results in discontinuous ideas except where connection is assumed unapprised.

David Hume came so close to discovering this truth. He did not find substance in his discontinuous and atomized perceptions. Thus, he lapsed into skepticism. Hume's case is not exceptionally his. Locke also suffered, and that was why he branded substances "something we know not what" (Stumpf, 1982, p.260). Attempts to restore substances' epistemic status found representation in Kantian objective conceptualism. The realm of concepts, discovered by Kant and taught to the world, became the realm of a priori legitimation. The consequence of such legitimation was Hegelian idealism. But it is not to be forgotten that the Kantian scepticism of objects and things-in-themselves was a function of seeking to know the nature of substance outside of what is given to man, in absolute normal perception. That is, however, absurd. But it is not implied here that the Kantian conceptual construct is the ideal for epistemic analysis. Even though Kant ended up in idealism, the goal of Kantian epistemic analysis is something to emulate. But he failed. His failure is the result of his a priori conceptualizations, not his goal. The analysis of knowledge is incomplete without the presumption of the cognitive subject's contributions. Such contributions must be put into hypotheses and later investigated. Epistemology is soon to become

a science that feeds "Artificial Intelligence" with data. So, as a matter of fact, the foundations of the metaphysical claims of men must be properly established.

The situation in the last century was really pathetic. It made a mess of philosophy. Absolute empiricism distorted the investigation's view and sought to eliminate metaphysics. But the search for substance must be done with an understanding of substance. The analysis of knowledge for reference within an empirically legitimating framework is an inadequate foundational project. The possibility of discussing substance based on its understanding here is not Kantian. In such an analysis, the substance of a thing is what remains of it if all predicates or accidents were wiped away. Thus, it is the essence of a thing. But the conception of the wiping away of predicates is even the foundation of our problem. If the grasp of substance were periodized, then predication would not necessarily be removed from the idea of substance. If all predicates were removed, then nothing. Not even the Leibnizian Monads are such substances. Locke found it difficult to understand what a substance could be like outside of predication. Thus, after taking away all the qualities, he described it as “we know not what” (Stumpf, 1982, p.260). The Lockean predicament is founded on Aristotle’s conceptualization. But again, all philosophies after Aristotle have misunderstood or found it difficult to differentiate between analytic fragmentation or separation and real separation. It is simple to speak of "substance and its predicates" in conceptual analysis (Evans, 1987, p.44). But in real investigation, it is to be understood that such fragmentation with respect to particular entities is not possible.

The location of a substance is an act of definition, specification, or stipulation. In such essential activity, substances or essence are a unit relation or connection or composition of a given degree or rate or structure of predicates particular to that unit. Thus, the qualities in a substance become the determination of the structure of this relation of qualities, including space and time if necessary. Space and time are used here because the contemporary concept of "space-time" applies properly to motion, if cognitive objective autocracy vitiates not only the critique of science of substance but of all knowledge claims.

3. Epistemic Analysis of Physics

The birth of physics has often been epistemologically associated with the reign of empirical objects. The Newtonian method, set forth in his Mathematical Principles of Natural Philosophy and Systems of the World (1962), is the claim that in this philosophy, particular propositions are inferred from phenomena. The empiricist import of Newtonian physics is inferred by philosophers from the fact that the Newtonian method involves the movement from the observation of phenomena, through hypothesis, experimentation, and theory, to prediction. Hume challenged the empiricist inadequacy of physics and thus resolved that the necessary connection is a psychological factor. So, when Hume was challenging the grounds of universality and necessity from an empiricist viewpoint, he was challenging the physics of Newtonian epistemology. The implication was that the empirical object was insufficient for the validation of physics. Kant attempted to save physics from Humean challenges by introducing concepts of necessity and universality.

The importance of the subject in physics was not successfully demonstrated by Kant. But such importance lingers on, especially with the use of mathematics (logic) in the demonstration of physical theories. Non-Euclidean geometry is a logical construct. It was this geometry that became useful in the theories of relativity (general). Besides, the special theory of relativity was discovered by both a physicist and a mathematician, Einstein and Poincare (Alozie, 2004, p.116), respectively. This gave rise to a great controversy. Thus, “the debate concerning the relationship of mathematics with physics has become very crucial.” (Alozie, 2004, p.116). Poincare’s several achievements in physics seem to suggest that physical discoveries could be made through mathematics.

Apart from the shapes and numbers, the remaining part of mathematics is logical reasoning. Because reasoning is only possible with a subject's tool, the subject's contribution to physics is critical. The logical positivists knew this; that was why they decided to add logic to positivism. Yet their conception of logic was linguistic (i.e., the view of logic as a language system with rules).

Viewed in its presentation, the relation, the necessity, and universality characteristic of physical theories are complex and contributed by the subject. As such, relationships presuppose the logical act of knowing. In a unit, a given standard is satisfied by objects of a given kind. The character of necessity is the idealisation of the unit exercise (one or more). Idealization is a normal human activity; it is not idealism. In idealisation, the subject standardises the judgement on the basis of the satisfaction of the standard by objects. The idealisation could be demonstrated in the following way: if A is a standard satisfied by an object {b}, then the idealisation is such that given A, then {b} satisfies A. Thus, idealization is not an arbitrary logical leap because it is founded on the basis of the understanding of both standards and objects. For instance, the Newtonian notion of gravity. According to this notion, it could be argued that given any object, a released object released from the top of a building, as differently understood or defined by Newton, falls on the universe. That is a simple act of logical idealization, which makes the judgement necessary and universal, without the kind of programme carried out on it by Kant.

4. Epistemic Analysis of Mathematics

The cognitive autocracy of the object affects mathematics as it affects other branches of epistemic research. Questions concerning the foundation of mathematics are not new to philosophy. From the time of Pythagoras to the present moment, the foundation of mathematics is unknown. Yet the elements or objects of the study are some real queer entities that constitute the foundation of things. The ideal universal of the Platonic forms makes mathematical knowledge possible. The forms are actually numbers in the world of Plato. This conception of numbers is classical and it squares very correctly with the traditional logistic programme. Russell, a veritable logician, bemoaned the fact that "... mathematicians do not read Plato, while those who read him know no mathematics and regard his opinion on this question as merely a curious aberration" (Russell, 1989, p.63).

Aristotle had already made the substances of nature the embodiment of all knowledge. The British empiricism of Mill reduces all sciences to experience. In terms of logic, he argued that "the principle of non-contradiction... is... one of our first and most familiar generalisations from experience, like other axioms" (Kneale and Kneale, 1962, p.375).Concerning the foundations of mathematics, Mill writes that it is a truth and that such a truth is the foundation of the science of numbers (Lehman, 1979, p.121).

In the age of science, empiricism reigns supreme. The consequence of this for the critique of mathematical knowledge is enormous. Quine summarised contemporary arguments in the foundation of mathematics as a review of the mediaeval problem of universals.The idea of the creation of mathematical objects in intuitionism could better be understood as the consciousness of time’s twoness (Lehman, 1979, p.92). Better understood, it is the conception of unity plus unity (Brouwer, 1981, p.18). The intuitionistic analysis's object of perception is not a creation of the subject but rather the consciousness of time, which is a succession. The conception of time as a succession of events, as represented in intuitionistic analysis, is not one grasped within the context of the constitution of numbers but that of the absolute time of Newtonian physics, which Kant adopted. Thus, it is the absolute objective succession that intuition refers to. The natural numbers begin at the level of a single consciousness, which is a two-ity; past and present.

In strict arguments, philosophers have discovered that the empirical world does not provide the natural number for mathematics. The consequence of this is that all forms of theories that

present mathematical objects as imaginary are dismissed. An instance of this theory is fictionalism. According to this theory, "mathematical objects are not real objects but false objects or fictions" (Lehman, 1979, p.66). Williard Quine was a thoroughgoing empiricist. It is his view that mathematical and physical objects on phenomenalistic grounds are myths. As a result, he contends that "from the standpoint of the conceptual scheme of elementary arithmetic of rational numbers alone, the broader arithmetic of rational and irrational numbers would have the status of a convenient myth..."(Quine, 1971, p.18).

5. Summary

The main objective of the paper was to demonstrate, through the study of the works of philosophers, that the dominant theoretical presupposition in all epistemic analysis is the assumption of the validity of absolute objective standpoint. The presence of the assumption in epistemic analysis has been proven through the exposition of the nature of the epistemology of metaphysics, physics, logic, and mathematics.

In metaphysics, it has been shown that the epistemic search for the justification of the concept of substance has been restricted to a search within the realm of the object alone. This explains why the nature of the concept has remained controversial.

The epistemic analysis of physics is said to depend on empiricism. Hence, it carries with it the baggage of empiricism. One such difficulty that would be faced by the epistemology of Newton's physics is Hume's empiricist challenge to the foundations of causality.

The foundations of logic are shown in the essay to be absolutely ontologically presented. Typical examples are drawn from Aristotle and the Stoics. The rendition of the laws of logic by Aristotle is very instructive of the full orientation towards the cognitive object.

Mathematical statements are shown to have problems with respect to their referent. Due to the absence of the idea of a number in the physical world, philosophers of mathematics have resorted to all manners of theories concerning the nature of mathematical entities.**6.**

6. Conclusion

In conclusion, the study has been able to adequately demonstrate, through content analysis, that the dominant theoretical guideline that instructs the programme of knowledge legitimation is the absolute objective standpoint or the cognitive autocracy of the object, which excludes and berates the inputs of the cognitive subject to knowledge claim.

References

Alozie, P.I (2004). *Philosophy of physics.* Calabar: University of Calabar Press.

Aristotle (1957). *A selection on Aristotle.* New York: Charles Scriber's sons.

Brouwer, L.E (1981). *Cambridge lectures on intuitionism.* Cambridge: Cambridge University Press.

Evans, J. D. G (1987). *Aristotle.* New York: St. Martin's Press.

Kneale, W. & Martha, K. (1962). *The development of logic.* Oxford: Clarendon Press.

Lehman, H. (1979). *Introduction to the philosophy of mathematics.* Oxford: Bail Blackwell.

Newton, I. (1978). *Mathematical principles of natural philosophy and systems of the world.* Princeton: Princeton University Press.

Quine, Williard v. O (1969). *Ontological relativity and other essays.* New York: Columbia University Press.

Quine, Williard v. O (1971). *From a logical point of view.* London: oxford University Press.
Russell, Bertrand (1989). *Mysticism and logic.* Australia: George Allen and Unwin.
Stumpf, Samuel E (1982). *Socrates to Sartre: A history of philosophy.* 3rd ed. New York: McGraw-Hill.