

## TRADITIONAL AFRICAN METAPHYSICS AND EMPIRICAL SCIENCE: ANY RELATIONSHIP?

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DOI: 10.13140/RG.2.2.26514.17604

### **Abstract**

*In trying to take the African situation or understanding of science as a case study, one is bound to find out that serious efforts have been exhibited or demonstrated for the sake of a scientific progress and exploration in Africa. However, the results attained in our indigenous researches are not comparable to the energy expended. This problem becomes the gap of progress often attributed to documentation and experimentation facilities in Africa. This paper attempts to shed light on the connection that exists between African metaphysics and empirical science. Employing analytic method, this study observes the lapses in African metaphysics and therefore recommends an alternate metaphysical foundation that will inaugurate a new thought system in African metaphysics.*

**Keywords:** African metaphysics, empirical science, ontology, experimentation, Scientific progress

### **Introduction**

The distinctions between metaphysics as body of beliefs and a tool of exploration in Africa, shall serve as the foundation of this paper. This paper will review and draw attention to some vital distinctiveness of metaphysics as the foundation of science and the basic tool of exploration in Africa. This claim, among others, has incidentally been the root of most unsympathetic and disparaging criticisms against African metaphysics among the West. These doubts, weakness and

criticisms of the African science of metaphysics notwithstanding the understanding of African metaphysics as the mechanism of science, due to its ontological relationship with forces and the chain that bonds reality and beings in the universe. The African desire to relate metaphysics with the empirical science, became the insight fuel that triggered the propel science and its continuous urge to go beyond just the physical side of reality just to interpreting reality from its cosmos. For an individual to motivate this push for balance creation, for whether, the point of authentic or even an imaginary fiction, for even taking such step, one would be acknowledged as the gap closer between African metaphysics and the Western empirical science.

But from the African worldview, it is not all quest for a quantitative nor a qualitative science grow based on the amount of progress made in African philosophy. Obi in his celebrated work "*African Philosophy of Power*" states that:

If this current African metaphysical situation is taken as a case study in relations to science, one will discover that serious and consistent efforts are made within the area inquires that go beyond the possible limits of attainable results within just the physical human arena (238).

Thus, the questioning energy lengthened within the African metaphysical context in terms of inquiries for scientific answer to the problem of vital force, man, nature, medicine and the universe.

### **The Notion of Metaphysics of Science in Africa**

Following Ozumba G. O in his '*Analytic and synthetic Dimensions of African Science* where he characterizes the metaphysics of science in Africa as:

An African man's way of observing, systematizing, testing, confirming facts of his environment, with the aim of achieving a high level of connection, coherence and understanding of his environment to aid him with the ability to controlling or manipulating the vital forces of nature to his advantage or at least to escape the heavy consequences of uncertainties which characterize natural phenomena in the universe (20).

This definition of African science is indeed embracing and very revealing. The definition brings to the fore such methodological elements of science as observation, systematization, testing, confirmation of facts, understanding, controlling and manipulation of forces of nature to man's advantage, etc. But this definition can ginger in the mind such questions as, if this is Metaphysics of

science in Africa, then what makes it different from the Western empirical science since this is exactly what the Western scientists also do?

Is it the metaphysics of science in Africa because it is only the African man that is capable of doing this in his environment? Or is it metaphysics of science in Africa because of a certain or peculiar mind-set employed by the African man to carry out such scientific activities within his immediate environment? Besides, which “an African person” are we talking about? Is it the traditional African person or what one would call “reorganized African man?” I think at this point in time, there is a need for a proper classification and enlightenment here because the technique of the metaphysics of science in Africa could not be said to be exactly the same with the method of Western empirical science. Hence, in this article, we shall classify metaphysics of science in Africa into the traditional African science, which we shall refer to the activities of understanding, explaining, and exploiting nature (for man’s use), which proceeded from African beginnings on African soil by the African person. It is traditional because it proceeded from the African environment and has been passed down from generation to generation, and has not been adulterated by the act of the empirical science.

Above justifies that in our quest for a clear justification to this work, we are not limiting the word “traditional” to our forefront fathers who were the creators of such science and had since passed away. “Traditional” also refers to the “pure African scientists” who have refused to be adulterated by the method of modern empirical science.

### **Method of the Western Empirical Science**

Before we delve further into the subject-matter of this work, one believes that it is proper to briefly outline the method of modern Western empirical science and its problematic. This emphasis should not be seen as a time wasting device, for it will at the long run help us in evaluating the method of African science: more so, when Western science is to most people the paradigm of which every other culture should imitate. Ordinarily, the method of science should involve an organized way or approach of carrying out scientific activities. It should involve recognized rules of procedure for carrying out research in sciences which are accepted by the scientific community. But unfortunately, scientists and philosophers of science are not unanimous as to which rules are to be accepted, or how many stages of procedure are to be recognized or which stage supersedes which, etc. Perhaps, part of the problem which has brought about these disagreements is that nature, the subject matter which science attempts to investigate is very

complex, ever revolving and has some tricks in her sleeves over humanity such that one method becomes inadequate to capture all her essences. The problem of what should constitute an all encompassing or general method of modern science dates back to the sixteenth century after the fall of Aristotelian method. At a point in the evolution of science, the method based on deductive logic was the generally accepted method but became obsolete as it was later found out that it could no more lead to the explanation of existing anomalies. Hence, by the end of the sixteenth century there was a call for new method of science. This brought about Francis Bacon's method which was essentially experimental, quantitative and inductive (Mason 145) and Rene Descartes method, which was basically deductive and mathematical (Butterfield 109).

### **Method of African Metaphysics**

We have classified African metaphysics into two categories, namely, *Spiritism science* and *restructured science*. To start with, *Spiritism science* one could hardly be separated from technical knowledge which is generally regarded as empirical science. Scientists of this influence, of course, like the Western rational scientists, seek to investigate the true nature of substantial reality. Occasionally they deal with the unidentified. But their activities do not stop at merely knowing or uncovering the nature of reality, for they as well put this knowledge claim into application thus it becomes difficult to separate the scientist from the technician or technologists. stringently speaking, at least from the Western viewpoint, scientists should be the discoverers of principles while the technologists should be the ones to apply them. But the traditional African metaphysical point of view, there is no sharp demarcation metaphysics and the metaphysical activities. Thus, Alozie in his work *History and Philosophy of Science in Ancient Africa*, he classifies traditional African metaphysics into three functional, structural and historical makes an important point that from the practice of the traditional Africans, we could understand that the Africans quickly appreciated the unity of knowledge earlier than the Western scientists (10). He continues:

Since traditional African metaphysics thrives more on the practical side, it could be said that its method is more of technique than theory. This is a slight departure from the method of Western empirical science, which seems to concern itself more with the ideas and principles which are propounded toward our understanding of nature (11).

Hence, to a large extent Western empirical science has been regarded more as a theoretical discipline. Thus, the method of empirical science is generally anchored based on just an empirical observation. Thus, like the Western empirical scientists, traditional African metaphysics employ the technique of empirical observation in their day to day activities and how realities unfold itself to them between time. Of course, they do not only stop at just an observation, but they carry out experiment and arrive at a more lasting scientific knowledge. In fact right from the earliest times in memorial, African ancestors are believed to have through empirical observations arrived at such lasting scientific knowledge of how to ferment traditional palm wine by the process of traditional distillation into gin (Umoren 18).

According to Sertima:

They were conversant with the flora and fauna of their environment such that they were able to understand and apply or manipulate the medicinal power of barks of trees, leaves, roots, animal furs, bones, etc, to cure serious diseases of various kinds (22–23).

Through observation, the traditional Africans devised means of crops rotation, preservation of land and in fact arrived at knowledge of food processing (Gyekye 26). From the above traditional scientific feats and several others not mentioned here, we would agree that neither the idea of observation nor experiment is alien to traditional African metaphysics even before the advent of the empirical science. The observational and experimental stages of traditional African method of metaphysics may not be as sophisticated as that of the Western scientist's. But the point to note here is that the traditional African method of metaphysical science is also anchored on observation. Another important element in the method of African metaphysical science is the idea of causality. Again, like the Western empirical scientists, the traditional African Metaphysical scientist knows that causality is quite crucial in understanding natural phenomena and vital force around the universe. The Western empirical scientist strives at giving a causal explanation of phenomena in the natural world. In doing this, the Western empirical scientist usually limits itself to empirical causation, asking such question as what is the first principle or makes 'A' to cause 'B' or how event 'B' is possible in the face of 'A'? On the other hand, the traditional African metaphysical scientist does not only stop at giving a causal empirical analysis or explanation. They goes beyond this when deem necessary to ascribe by what Gyekye his *African Philosophy in Search of Identity* published in 1995, calls "agentive causation" (28) to natural phenomena as

they occur. Thus, in explaining the cause of an event from the African metaphysical point of view, a sickness or death, for instance, the African metaphysical scientist will tend to raise the “who caused it” and “why it was caused” questions more than the “what and how questions.” Following Minkus, analysis and writing on the Akan cause and effect theory, gives us a good clear clue to our direction here. He gives an illustration thus:

If one person steps on a snake and is bitten, the occurrence may be ascribed to his carelessness and perhaps dismissed as happening without ulterior reason (eye okwa). But if he dies from the snake bite it is more than likely that either his own destiny or else witchcraft, sorcery or some other cause will be proposed to explain why such a thing should have happened (141).

The implication of the above explanation is that the traditional African metaphysical scientist does not believe in chance occurrence. Everything is caused, and can be explained either by natural reference or metaphysical reference depending on the magnitude of the event or supernatural involvement of force in Africa.

### **Witchcraft, Magic and Sorcery as a Foundation of African Metaphysics and Science**

Witchcraft, magic and sorcery, are the phenomena normally not considered as objects of scientific study in the West, because they are not based on an empirical observation. Indeed, from the western empirical scientific criteria, these African vital forces are rejected as unreal and are generally classified as irrational, if not outright unintelligible. Yet, the history and historiography of the human society shows evidence of such beliefs and practices around the makeup of human, whether in the past, present or the future. The point here is that these paranormal activities are not an African idiosyncrasy, although their might and extend among African societies deserve the special attention given to it.

In Africa, individuals are concerned about the phenomenon of witchcraft magic and sorcery has been conducted, by individuals with the knowledge or ability to man over nature. Thus, in Africa (Ralushai et al.) believed that the existence of witchcraft is foundation that link man world and that of the vital force that makes up the universe, they go even further to say that: “...it is quite clear that witchcraft as a phenomenon is still a factor to be reckoned with in other regions

of Africa.... witchcraft beliefs occur among people of all levels and it's the foundation of interpreting reality from the unseen" (57).

They found that executions of witches without formal trials by members of the community increased dramatically over the past ten years. Communities believe that the science of witches is an ontological issue which will require more interest in Africa. (Moyers 333) believed that, the ontological implication of witchcraft in Africa is that no entity is one thing in itself. Every entity manifests one aspect at one time and another aspect at another time, yet fundamentally remains itself. This is why the Western idea of invention becomes the notion of the non-contradiction validations of the operation of force in the universe.

There are issues of genuine philosophical interest about the status and possibility of events attributed to witchcraft. The possibility of such acts, of course, presupposes that witches exist. But, first, we need to know the kind of entity that witches are supposed to be. Generally, and granting the possibility of local variations the conception of witchcraft in Africa is that witches are normal human beings who operate mainly within the metaphysical domain of the universe. Witches possess the extraordinary capacity of transforming and manipulating the universe to their advantages.

### **The Science of Traditional African medicine and its Metaphysical Interpretation**

The science of African traditional medicine and its Metaphysical Interpretation is a range of traditional medicine disciplines involving indigenous herbalism and African spirituality, typically including diviners, midwives, and herbalists. Practitioners of traditional African medicine claim to be able to cure a variety of diverse conditions including cancer, psychiatric disorders, high blood pressure, cholera, most venereal diseases, epilepsy, asthma, eczema, fever, anxiety, depression, benign prostatic hyperplasia, urinary tract infections, gout, and healing of wounds and burns and even Ebola with an unphysical connection or influence of vital force.

Diagnosis is reached through a metaphysical means and a treatment is prescribed, usually consisting of a herbal remedy that is considered to have not only healing abilities but also symbolic and spiritual significance. Traditional African medicine, with its belief that illness is not derived from chance occurrences, but through metaphysical or social imbalance, differs greatly from modern scientific medicine, which is technically and analytically based. In the 21st century, modern pharmaceuticals and medical procedures remain

inaccessible to large numbers of African people due to their relatively high cost and concentration of health facilities in urban centres. According to Abdullahi, AA in his; "Trends and Challenges of Traditional Medicine in Africa". *African Journal of Traditional, Complementary and Alternative Medicines*. Written in the 2011. He is of the vies that:

Traditional medicine was the dominant medical system for millions of people in Africa prior the arrival of the Europeans who introduced science-based medicine, which was a noticeable turning point in the history of this tradition and culture. Herbal medicines in Africa are generally not adequately researched, and are weakly regulated (115–23).

There is a lack of the detailed documentation of the traditional knowledge, which is generally transferred orally. Serious adverse effects can result from mis-identification or misuse of healing plants. The geographical reach of this article is Sub-Saharan Africa. Though, of course neighbouring medical traditions influenced traditional *African medicine*.

### **Science and the African Culture**

The point of the research on African metaphysics or Thought pattern undertaken by the like of Sodipo and Barry was to apply the techniques of what has become known as empirical science to the discourse of the African metaphysics. The Africa Metaphysics or fields of discourse preselected as of particular interest were those relevant to three primary foci of academic philosophy: epistemology or the theory of knowledge, ethics and aesthetics, and the philosophy of the natural world, cost and effects. The primary sources of things, everyday level were individualized discussions and interaction with nature over a long period of time in Africa (once stigmatized as witchcraft '*witch doctors*', but best regarded as herbalists or alternative medical doctors) in Africa.

### **Scientificity of African Religion (Metaphysics) and the Redefinition of Secularism**

In pre-colonial Africa secularism was unknown. (Mbiti 9) speaking about traditional African society explains that "religion penetrates so intimately all the domains of life that it is not easy, nor even sometimes possible, to isolate it". Moreover, the African's holistic perception of the universe involved the unity of the visible and the invisible which excluded secularism.



At this point in time, we intend to demonstrate the fact that secularism should not be applied in the studies of African metaphysics in the same way as in the empirical science. For this purpose, we shall show that African religion or metaphysics is contrary to the systematic analysis of the empirical science of the west, African religion metaphysics in this point of view involves an African scientific content and the cultural ones; these later are necessitated by the need to apply the scientific religious principles of the African religion metaphysics in specific social milieus. Moreover, the scientific nature of African religion metaphysics leads to a normative discourse of morality, a scientific ethics; this implies that being scientific African religion metaphysics lends scientific bases to African ethics. Therefore, any strategy of secularization in Africa must first make the distinction between the scientific content of African religion and the science; consequently, we will demonstrate that African must adopt non-secular policy vis-à-vis the scientific aspects of African religion metaphysics and apply secularism only toward the various cultural contents of dealing with a metaphysical issue. According to Oruka, our approach for the demonstration of the scientific nature of African religion will be the: “solar cosmological interpretation” (SCI), a method devised by the Institut des Sciences Animiques (ISA), an Afrocentric thinktank whose center of interest is the scientific defense of African epistemology, spirituality and metaphysics” (25).

Thus, the solar cosmological interpretation involves the use of the metaphysical facto-deductive scheme to state the kemetic cosmological argument and the presupposition use of the kemetic cosmological argument as a systematic natural theology to validate or affirm the scientificity of an element of African traditional culture by establishing the correlation between its ethnography and the systematic natural theology or cosmos. The solar cosmological interpretation thus, attaches to the religious content a statement of scientific verification. However, as the trends of African religion are various, we will use in this demonstration Kôngo religion, the Bukôngo, which has been demonstrated as retaining the original characteristics of solar religion, the religion that characterized the ancient civilizations of Egypt and Sumer; thus all other trends of African religion can be shown to be the result of the devolution of solar religion, of the Bukôngo.

### **African Interpretation of the Beginning and End of Existence**

The question on how did existence (things) or life begin, becomes the most fundamental question in metaphysics and the empirical science. There can hardly be a bigger question to the origin of things from the African metaphysical point of

view, than that of the empirical science for which the cosmology of human evolved from. Almost everyone believed in the empirical science version of nature and how existence starts; to be a byproduct of *big band theory* or a justification of fission. Any other explanation to the source or origin of things apart from metaphysics is inconceivable.

Over the last century, a few scientists have tried to figure out how existence spring up or tried to investigate the source and origins of things outside metaphysical interpretations. But so far nobody has managed a convincing result to that effect, but existence has come a long way. Today, many philosophers studying the ontological origin of existence are confident that, they are no right track to understanding the origin of things without acknowledging the fact that they originated or springs out of a metaphysical interpretation of the universe in the African point of view, with critical arguments to back up their confidence. Acknowledging the fact that African metaphysics is the foundation of all things, because even the empirical science, become a quest or tools to discover the ultimate origin of the African metaphysical postulation of forces responsible to the harmony that exist in the balance of the universe.

### **The idea of vital force in African metaphysical thought**

The notion of vital force has influenced a number of African philosophers since Placide Tempels supplied what he considered the Bantu perspective of the relationship between the meaning seeking human and the physical nature that the human being observes from a subjective vantage point. According to Tempels, in his *Bantu Philosophy*, written in 1959, he stated that: “The Bantu people conceive force as equivalent to being, rather than an attribute of being that is considered as that which subsists. This essential element of reality is variously described as life, potent life, force, vital force and vital energy” (19). This all-pervading impulse or energy is not visually observable, yet it penetrates all things, both material and non-material that are metaphysics, as a fundamental principle of reality. Tempels not only harps on the centrality of the notion of vital force in Bantu traditional science, he controversially announces such a conception of reality as primitive, even as he contrasts it with the Western understanding of empirical science. Tempels writes that:

We the Westerners can conceive the transcendental notion of “being”, by separating it from its attribute, “Force”, but the Africans cannot. “Force” in his thought is a necessary element of “being” and the metaphysical concept “force” is inseparable from the definition of being. There is no idea among African of “being” divorced from

the idea of “force”...We hold a static conception of being, they a dynamic (35).

Tempels’ essentialisation of vital force and his exoticisation of the metaphysics of the Bantu traditional worldview have elicited a backlash from the empirical science conception of the African metaphysics. He has been accused by many western scientists of pursuing an agenda not different from the agenda of earlier Western thinkers like Hegel and Levy-Bruhl who denigrated African reason Hountondji in his celebrated work *African Philosophy: Myth and Reality* written in 1996. He is charged with fashioning Bantu ontology in the mould of the then popular Bergsonian vitalistic philosophy, even while primitivising the science of African metaphysics the presumed Bantu vitalistic orientation. Tempels is accused of instituting the myth of unanimity and promoting the exoticist view of African metaphysics over the empirical science as one inherently intuitive and illogical. Hountondji notes that:

At first sight, then, Tempels’ object appeared to be to rehabilitate the black man and his culture and to redeem them from the contempt from which they had suffered until then. But on closer scrutiny the ambiguity of the enterprise is obvious. It is clear that it is not addressed to Africans but to Europeans, and particularly to two categories of Europeans: colonials and missionaries (34).

African metaphysics for him is a mere pretext for learned disquisitions among Europeans conception of the empirical science. Hountondji sees in Tempels’ work the beginning of an intellectual orientation that supposedly seeks to distance African metaphysics from that of the Western empirical science, in particular, by exaggerating and romanticising uniqueness. Notwithstanding the sharp criticism of Tempels, it is clear that African metaphysics, and specifically the idea of vital force, captured a prominent feature of the traditional African belief system.

In one form or the other, the idea of vital force continues to surface in the works of African metaphysics in relation to science. Indeed, the concept can be regarded as supplying some kind of ontological foundation for the famous notion of the complementarism or communitarianism of a traditional African value system as well as world-view. (Nalwamba & Buitendag 5) writes that: there is something retrievable from Tempels’ notion of vital force. By looking at various ways (i.e. triangulating) in which the concept of African metaphysics has been applied...vital force is an adequate concept of nature and the cosmic of things. It opens up the African concept and reality as unified and participative within the realm of interconnected and interdependent beings. The holistic

metaphysical structures erected by thinkers like Senghor (1964), Ramose (2002), Asouzu (2004), and the Afro-communitarianism of scholars like Nyerere (1968), Menkiti (1984) and Gyekye (1997) are either explicitly or implicitly founded on the concept of a metaphysical operation of the universe, all-pervading impulse active in nature.

Thus, Nkemnkia suggests that:

Vitalogy” marks a milestone in African thought. Even when there has been a tendency to provide a naturalistic account of the concept of vital force, the unifying function of the concept is acknowledged either in relation to the community of individuals whose mutual communication creates meaning, or in relation to the universe as an immense network of interconnected essences and facts (42).

Specifically, (Weidtmann 109) writes that what Tempels...describes as a force therefore has to be reformulated as meaning the concrete experience of the multidimensionality of human reality. The individual person experiences vital force when she takes part in the process of reconstituting (reviving) the community. Vital force, however, is neither the essence nor the being of the individual person nor that of any other entity, just as research, practical and empirical analysis means to the empirical science. What Weidtmann’s seemingly immanentist interpretation of the notion of vital force will, at first, appear to close the door to transcendence. This is the case since vital force is given a radical historical.

## **Conclusion**

It could be said that the developments recorded within the last one hundred years within African metaphysics have been so fragmented and unsystematic as to maintain a continuous growth as is visible elsewhere. This issue is not only verifiable within the area of the pure natural or empirical sciences but more so even at the level of the socio-economic and political arena. Most of the social and economic systems being practised within the African set-up are often mutilated and functional forms of models, obtainable elsewhere, without corresponding metaphysical insight just as that of the empirical science. Visible functionality of models is no measure of realisation of the metaphysical hindsight behind what it is a model of. To adopt a system or model of something is evidence of our recognition of a problem as genuine like that of the Western empirical science, i.e. a problem that necessitated recourse to such a model. Now, adopting and adapting the model as answer expresses one form of limitation or the other. To

go beyond the model demonstrates the urge towards the dictates of our metaphysical reason to provide adequate answers. Success in this toss from model to its source and back can be achieved only if the model is subjected to thorough critical examination. In this case the mythical metaphysical reason cannot mix well with what it is a model of the empirical science does not take time to critically know itself and its limits.

African scientific endeavours have to meet certain minimum standards to be relevant. In this sense science becomes an ongoing modification and refinement of scientific methods and achievements with a view to determining new and even better ways of understanding the same reality. This approach must be coupled with serious efforts and to document the results of findings. In the same way there is need for refinement of the method used to communicate results to a third party towards incremental development of knowledge.

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