

AFRICAN LOGIC

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Abstract

As a major branch of philosophy, logic deals with the basic principles, techniques and methods for distinguishing good arguments from bad arguments. It focuses on the validity and/or the soundness of our reasoning processes. It is through the instrumentality of logic that we can distinguish between truth and falsity, consistency and inconsistency, validity and invalidity, etc. in our daily usage of language. Logic is a prerogative of the human person as a rational being. However, some scholars have argued for the non-existence of African Logic. This position has troubled the mind of the researcher. The pertinent questions now are: Is there anything like African Logic? If yes, what is the nature of African Logic? Therefore, employing the philosophical method of analysis, this study strongly argues that there is African Logic. It maintains that an organized life, like that of the African people, cannot be possible without the tool of logic that is anchored on the culture of the people. This study finally submits that African Logic is a major branch of African Philosophy which deals with the thought-pattern, language and worldviews of the African in the African world.

Keywords: Logic, Philosophy, African logic, African Philosophy, Rationality

Introduction

The word logic is not new to many of us. We have heard of it before and many of us have used it severally in our speeches and writings. But despite its familiarity, it is a word that most people find difficult to define in clear terms. This is because the word 'logic' can be used in several senses. Francis Offor identifies three major ways in which one can look at the term 'logic' all of which are equally correct. In the first sense, the term logic is used to describe the totality of all laws guiding the human thought (Offor, 2010, p.3). It is a truism that humans are rational beings whose thinking processes are based on certain principles. The totality of these principles can be described using the word 'logic.'

In another sense, the word 'logic' can be used to describe the principles guiding the operation of a mechanism. Every gadget or thing has its own inner logic which describes the way such a gadget or a particular thing operates. For

instance, when we operate our GSM handset, it follows a given procedure. When a call comes in, we have to press the 'receive' button and the call is received, and to end the call, we have to press the 'end' button. If we press the 'end' button and the handset starts sending messages indiscriminately, then something is wrong and the set will be said not to be operating the way it ought to, that is, according to its inner logic. Therefore, the operation of a mechanism is guided by certain principles which can be referred to as the inner 'logic' of that mechanism.

The foregoing conceptions of logic are all correct in their own right, but these are not usually the ways in which professional logicians speak of logic. They often speak of logic in its strict and technical sense as an academic discipline. In this sense, logic is therefore seen as that branch of philosophy that deals with the study of the basic principles, techniques, or methods for evaluating arguments (Bello, 2000, p. 1; Offor, 2012, p.3; Ndubisi, 2014, p. 32). Understood in this sense, logic reflects upon the nature of thinking itself; it attempts to answer such questions as: what is correct reasoning? What distinguishes a good argument from a bad one? Are there methods or ways to detect fallacies in reasoning, and if so, what are they? Indeed, this project of discerning between correct and incorrect reasoning is the central problem with which logic deals and all the principles and techniques in the logic of any people are developed primarily for the purpose of this discernment.

Now we have seen that logic can be used in more than one sense when it is looked at in its loose, technical, professional and academic senses. Offor, (2010, p.2) describes logic as a branch of philosophy that teaches us the basic principles, techniques and procedures for distinguishing good arguments from bad ones. This is in line with Copi who defines logic as the study of the methods and principles used to distinguish good (correct) from bad (incorrect) reasoning (Copi 1994, cited in Jaja&Badey, 2012, p.96). By correct reasoning, we mean the art of finding reasons and/or evidence which do, in fact, support and /or prove our conclusion (Ndubisi, 2014, p.32). Echukwube provides a rather instructive definition of logic when he states that logic is concerned with the process of thinking and reasoning as well as the symbolic expression of such process in verbal or written form (Echukwubeas cited in Jaja&Badey, 2012, p.96). From here, one can understand logic to be science of reasoning by which problems are solved and conclusions drawn from premises. In fact, one is said to be engaged in logic when one reflects on and examines the principles in terms of which understanding and right judgment must be achieved. Hence, Aja (2008)

maintains that logic is interested in justification of ideas and assertions (p. 3). Copi (1982) emphatically averred that logic studies the method and principles by which we differentiate good reasoning from bad reasoning and correct reasoning from incorrect reasoning (p. 21).

Logic concerns itself with the proper method of reasoning, for the art of sound, correct and critical reasoning is in the domain of logic (Ndubisi, 2014, p.32). Logic distinguishes between truth and falsity, consistency and inconsistency, orderliness and disorderliness, validity and invalidity in our daily approach to reality by use of language. As I have noted elsewhere, it is the function of logic to dispel the confusion that often arises in our everyday discourse and, indeed, the human person is called rational on the ground of his natural ability to engage in logic (Ndubisi, 2014, p. 32).

Logic: Universal And Cultural

Logic is a branch, a tool, and the most rigorous aspect of philosophy. As Ogugua and Ogugua (2015, p.244) observe, and rightly too, it lies at the core of philosophy. As a tool of philosophy, logic looks like philosophy in so many ways and we cannot truly engage in philosophy without it. Like philosophy, logic is both bound and boundless; both universal and cultural. Let us first highlight the fact that philosophy has these characteristics. Philosophy could be viewed from different perspectives. Etymologically, its definition stands to be love of wisdom. It can also be seen as a people's worldview or an attitude towards life. All these point to the fact that philosophy is both a universal enterprise as well as an enterprise within the bounds of culture. Philosophy as an enterprise is not necessarily academic. Thus, Ogugua and Ogugua (2015) aver that it is a many sided enterprise with degrees of ascension and acceleration in the journey of thought, wonder and meditation (p.244). This is not particular to philosophy alone. The academic and non-academic aspects abound in other disciplines and human enterprises including religion, mathematics, science, etc. We do find people ordinarily called illiterates doing well in mathematics and medicine. These are not 'academic' mathematics or medicine, nevertheless they are mathematics and medicine and there is no need to tag them 'debased' as most purists of our time do. Therefore, it will be expecting too much from every people to have at once philosophy that is purely academic or theoretic. This is because philosophy has always grown out of a people's understanding of the meaning of realities in their worldview.

Without the culture of a people, therefore, philosophy is almost impossible. Philosophy results in a place only when people of/in a place attempts to arrest the challenges and problems of that milieu through critical thinking. What we know today as African Philosophy is a product of African trying to understand the realities in the African world through rational means. Understood in this sense, philosophy inasmuch as it is boundless by reason of its universality, is equally bounded by cultural influence, and this is why we can rightly speak of African, Chinese, Indian, British or American philosophy. What this suggests is that although philosophy is universal, it is not boundless. There are boundaries, because every people will undertake the quest for understanding the meaning of realities and human existence differently in accordance with their different worldviews.

But if philosophy is truly relative in this sense, as we have already made clear, then logic too is affected notwithstanding that logic is, as Ogugua and Ogugua puts it, a science of pure form. Logic too has universal and cultural elements. Its universality lies in its form (artificial logic), while natural logic is culturally bound. This point is well highlighted by Ogugua and Ogugua (2015) when they observed:

Logic does not pay attention to either truth or matter or declarative sentences as such but one would expect the difference to lie in and with natural logic and not with artificial logic. It will be out of place for one to expect Igbo-African logic to be at the level of sophistication as the formalization and abstraction of thoughts, making the study of forms in logic removed from the realities of thought and language; that is, being myopic as to suffer from mania for symbols. (p.244)

The fact is that knowledge of artificial logic is only acquired in the class room. But it is absurd to say that uneducated people or even those who have not taken any course in neither philosophy nor logic does not apply logic in their life experiences. This means that the universal, abstract or artificial logic, that is, the study of forms, is not all there is to logic. Yes, logic can be universalized because it has to do with symbolization, but there is more to logic than symbols. The idea of logic shows that it is not out of place to have African logic – a sound logic concerning itself to matters of practical import – a logic serving the purpose

of language, law, morality, habit etc – a tool for articulation, appreciation, and understanding realities in Africa (Ogugua&Ogugua, 2015, p.244).

There is Western logic and there is African logic. There is logic in all cultures inasmuch as there is language through which they attempt to understand and explain reality.

Is there an African Logic?

From the discussion above, it is clear that an organized life, a way of life cannot be possible among a people without the tool of logic. How could a people deprived of logic have a culture including language? How could they achieve right reasoning as rational beings? In fact, how could their lives be meaningful? Logic is concerned with the clarification of language and it facilitates correct reasoning. Generally, it ensures that one has an ordered facility. It is clear that without logic, it is practically impossible for one to perform basic human functions including linguistic functions. This is premised on the fact that the capacity to organize reality intelligibly by means of language is made possible by logic.

The truth is that without language, life itself will be meaningless. Logic is central to any culture because every culture has a language and language is only made possible by logic. Every language belongs to a culture and every culture belongs to a people. Logic makes language possible, and language expresses culture. It follows therefore that culture presupposes the existence of logic. On account of this connection, one would discover without much ado that logic is fundamental to African worldview. This is why we make bold to assert that logic is an element of culture. Africa as a whole has a culture, and all of its parts are embellished with cultures, all of which can only be possible with logic. The logic inherent in any given culture is made more manifest by the language of the people. For this reason, Ogugua&Ogugua (2015, p.247) aver that the logic of a people is not only discernible but discoverable in their language. And it is in respect with the logic found in a people's language and behavior that we postulate the existence of African logic.

Logic can have no content and form without language, and language is used to express or picture reality. Therefore, logic has to do with the way we speak about things, about what is. But a discourse of what is, is a metaphysical discourse. Metaphysics is the study of whatever is insofar as it is – the study of being. The study of being, however, is not exclusive to Metaphysics. Epistemology, properly

understood, is also a study of being from quite a different perspective. Metaphysics studies being from the point of view of existence while epistemology studies being from the point of view of cognition. The study of being, however, primarily belongs to Metaphysics because Epistemology does not enjoy unlimited scope that Metaphysics enjoys: what is may not be known or even knowable. But we do not have the logic to speak of what is not known to us. Logic as an epistemological tool only furnishes us with wherewithal to talk about reality as we encounter them. It is right then to say that epistemology is an instrument of Metaphysics itself mainly concerned with ontology, while logic is that of Epistemology.

I have highlighted this inevitable connection between logic and epistemology elsewhere when I noted that:

Epistemology inquires into the nature, possibility and veracity of human knowledge. It deals with the object and problems of human knowledge. Logic, on its part, distinguishes correct reasoning from incorrect reasoning. It borders on the criteria or the yardstick for our acclaimed knowledge...Logic provides the necessary 'instruments' for proper presentation of what we claim to know. (Ndubisi, 2014, p.32)

Now the objects of our knowledge are beings, things, what is, and not no-thing. Epistemology makes use of logic to venture into reality and experience has shown that the whole of the human race does not view reality from a common perspective. We often do not fix attention in the same object during cognition and even if it so happens that we do, each of us looks at it from his or her perspective. So, the answer to the question of the existence of African logic is very clear. Without going into the Great Debate on the Existence Question of African Philosophy, we note that the fact that there exists African Philosophy, presupposes the existence of African Logic. Thus, Kanu (2017) avers that, having established the existence of African philosophy, it would be illogical and contradictory to ask the question: is there an African Logic. Uduma (2015) observed that:

The existence of African Philosophy is supposed to dovetail the existence of an African logic. So even if we cannot currently present one, the possibility should exist. After all, African

philosophy itself is relatively very recent and to overcome the tension that governed its emergency its corollary African logic should be accepted even if it is only conceptually (pp. 59 – 60).

Indeed, no group could have existed for any length of time without the ability to reason and think, that is, without philosophy. Furthermore, man's ability to make use of language undoubtedly presupposes the presence of a fundamental logical disposition. In this regard, Africa is not an exception.

The Concept and Nature of African Logic

Jaja and Badey (2012) define African logic as “the application of the thinking process on the African world, language, culture and objects” (p.96) . For them, although the African logic is natural, it allows the artificial symbolic logic of the West to influence it. By natural logic is meant critical, discriminating, rational and reasonable discussion and discourse in natural language, and by artificial logic is meant the setting up of constants, variables, sentence connectives and deduction and transformation of rules, for deriving the formal validity of arguments and symbolic logic (Momoh, 1989, p.167). Logic precisely is that pattern of thought found in everyday discourse of a people (Jaja&Badey, 2012, p.96). It is concerned with the clarity of expression, the avoidance of fallacies, vagueness, ambiguity and contradictions in language.

Thinking and reasoning is not peculiar to any particular people even if we grant, and we think this is true, that, not every thinking is reasoning. We may think of so many things even as we carry out our daily tasks or listening to a speaker in a gathering without really applying our reasoning to them. This attitude in human cognition also applies to all humans as does the application of logic to facts of life. Reasoning is the activity or process of adducing, collecting evidence, weighing them, and drawing conclusions based upon these evidences (Ndubisi, 2014, p.32).

African Logic is a major branch of African philosophy and it deals precisely with the application of reasoning to the world and culture of the African, to his language and object of his reference. Thus, Jaja and Badey (2012, p.96) observe that African logic deals with thinking [understood as reflection, assessment or reasoning], language or inference all of which are usually with reference to one's world and culture. Since language is the tool of the philosopher, African language becomes the vehicle of African logic.

African logic is shaped therefore by the way the Africans view reality. It is a natural logic encompassing the entire worldview of the African peoples and culture. African logic thus concerns itself not so much with abstract reasoning as with difficulties and problems of real life. This is why Jaja and Badey (2012) are of the view that African logic is that natural logic which applies to juridical, pragmatic and concrete problems in the African existential world (p.101). Thus, the African logic is not satisfied with mere validity of arguments. Emphasis is laid on the truthfulness of each claim.

The African logic from what we have said above is connected to their ordinary language. As already noted, language would be an unrealistic dream without logic. Nevertheless, the rules, principles and laws of logic are quite evident in African mode of thought. Indeed, there is no doubt that the ordinary language may not be able to be used in making subtle analysis and distinctions. This reason, observed, Ogugua and Ogugua (2015, p.248), compels some thinkers to hold that symbolic logic with its artificial logic is of prime importance.

The artificial language of symbolic logic appears more perfect than the natural language to some philosophers. Hence, some philosophers try to formulate their theories in such artificially regulated logistic language (Unah, 1998). We do not attempt to deny the scientific nature and value of the artificial or symbolic logic, but we do not think that it is a *condition sine qua non* to logical thinking nor is it the very essence of logic generally. As a matter of fact, the essential characteristics of logic can be realized by the use of natural language, symbolism standing only for elegance and precision.

It is true that natural language has the tendency to accommodate vagueness. This point notwithstanding, logic in its natural language is nonetheless logic, also embodying completeness of thought. The African logic does not have to be subject to logical calculi to be called logic. This is not to say that our thoughts cannot be formalized or symbolized painstakingly. Of course that is possible. But there is nowhere that an individual is subjected to logical calculi to show that he/she is logical; not even in Europe.

Actually, one has to be a logician in the academic sense or a philosopher to truly understand the mathematical logic. The fact is that the Traditional European cannot understand mathematical logic without proper training. Logical ability

restricted to formal truth in logic is, without doubt, a monopoly of trained logicians, not even trained philosophers (Ogugua&Ogugua, 2015, p.249). Therefore, the African logic is essentially logic in natural language and no one would dare to deny without contradictions that this is logic. It is a logic observing the syntactical and semantical rules and the rule of right inference and of valid argument though the Africans did not set out these rules in form of mathematical symbols. The fact, then, that the Africans have logic is clear from the fact that they have always made inferences in life and have always seen nature or reality as something intelligible, and indeed, they have organized reality in history. This is what Levy Bruhl failed to understand when engulfed in the darkness of prejudice and the desire for White superiority he asserts that the Africans are pre-logical, primitive and lacking in logic. Holding this sort of view is the very height of ignorance (of the nature and dimension of logic), for logic remains the intellectual sheet anchor of a people's appreciation of life.

Conclusion

History, learning and experience show that the Africans are logical in their thought and behavior. This could not be possible if there is not in Africa the existence of logic. There is no gainsaying the fact that the Africans know and recognize what is now known as the laws of thought namely, law of identity, law of non-contradiction, and law of excluded middle. These laws are seen in operation when the Africans make attempts to resolve their day-to-day problems. Here, one finds out that the African knows that what is is, and what is not is not; and that something cannot *be* and *not be* at the same time for this entails inconsistencies. They do this without necessarily having to pattern their thought in the formal structure of syllogistic logic or engage in propositional logic – and we do not think we learnt from any other people to do this even if any other people does so. African logic is therefore an existential reality.

Logic as we have elaborated is a concern with correctness of argumentation. Once we identify the subject matter of logic as arguments, it becomes clear that logic lies at the heart of human existence; human life is directed by argumentation. This applies to the African as it applies to all cultures. Arguments thus mean reasoning and the African's ability to conduct his daily affairs ordinarily means that he is eminently logical (Uduma, 2015, p. 67).

In sum, there is African logic which deals with the thought-pattern, language and worldviews of the African in the African world. The works of many African philosophers, in this regard, attest to the existence of African logic.

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