

Examining the nature of African logic

John Okwuchukwu Egbonu^{1*}, Judith Gure Gwatana²

^{1*}Philosophy Department, Saint Albert Institute Kagoma, Kaduna State, Nigeria. okwycares@yahoo.com

²Philosophy Department, Rivers State University, Port Harcourt, Nigeria. judith.gwatana@ust.edu.ng

*Correspondence: okwycares@yahoo.com

Received: 22 June, 2022 | Accepted: 07 July, 2022 | Published: 21 December, 2022

Abstract: The role of culture and custom in philosophy and logic is the centre point of this study. Therefore, the nature of African Logic explains how unique and peculiar it is in connection with the African world view. It establishes that the first step to understanding a people's modus operandi and modus vivendi is to first of all, study and understand how they think and reason. Hence, people's systematic way of reasoning explains their cosmological interaction peculiar to them. By doing this, one understands and know the reasons for every action taken and what it represents. This research examines African Logic as an imperative that explains and account for the cosmological experiences of the African people. Using critical analysis method, this work argues that Africans have been misunderstood and misrepresented in their thoughts because of the use of Western Logic to study and understand African people. Thus, it suggests that the best way to know Africans is to understand their worldview and Logic. This does not refute western logic but holds that its use in Africa as a standard to assess Africans is out of place and will not yield good results.

Keywords: African logic, African world-view, Connectedness

1. Introduction

Human existence in an African situation can better be understood when people understand the African ontology and world view. This world-view deals with the way Africans perceive, think and react in their sociocultural dealings. As such, this article argues that African logic is the best reasonable approach to best assess and understand the African way of life. It is so because the ontology explains how beings in the African perspective react and interact in their varying culture. Against Western logic for instance. A serve as a fixed variable or option in arguments (that is A is A and nothing more) as considered in Aristotelian Logic "that is concerned with kinds of Propositions that can be analysed as quantifier (every, some or universal negative quantifier no, 2.a subject, 3. A copula5. Predicate...", in African logic, if A is a variable, it is not fixed or constant because such a variable could serve dual purpose in the same argument. The possibility of this lies in the interaction that exists between the physical world and the spiritual world within the African ontology, the reason why Africans have and rely on seers and Chief Priest who act as the go between for both spirits and living. It is interesting to note that in an African setting, both the spirits, the living have a way they interact. Ijiomah (2014: 32) affirms this by saying "all beings exist in a dual and interrelated fashion. The sensible are not wholly sensible. Things exist as phenomena of visible and invisible realities. This is dual but interwoven existence." Thus, it shows the connectedness and relationship that exist in the African system and the belief between the living and the spirits can be well explained only when you give attention to the existing connections that these two worlds share, which African Logic explains in its approach to realities.

Following this duality in African ontology as held by Ijioma (1996) and Lucky Ogbonnaya (2022: 115), further avers that "African duality theory explains that reality is two sided". African logic becomes more accommodating than refuting. It looks for the complementary nature of any reality rather than the contradiction as promoted in western logic (Gottlieb. 2019). One begins to wonder how possible this can be, especially where

in Western Logic the belief in the living and the dead still having relationship or that both the living and spirits have connection appears and sounds contradictory. It is possible because in African world view, there is a high propensity of the spiritual influence and roles the ancestors or spirits play among the living. As such, African logic does not promote contradiction because it is not fixated like Western Logic rather it prefers complementarity (Ezumezu, 2019) since it is more accommodating and provides room for a variable to play multiple roles in a particular argument. While there are unacceptable within the circumference of Western logic as oppositions and paradox, in African ontology, there are realities that complement each reality for mutual and healthy living. As such, one can ask: Can there be an interaction between the spirit and the living? This question can only be understood in this study of African ontology and understanding of African Logic.

African logic is the system of reason and thoughts within the African perspective and world-view. Understanding Africans and knowing how they interact is not by encountering Africans alone but by knowing their beliefs, world-view and how they reason. By doing this, this connectedness can be understood. Using the Western logic lens or perspective, this could be considered as contradictory in nature because what is not, can never in any way, be that. Thus, whatever is not, is not and whatever is, is (Britannica, 2022). This is the law of identity as understood within Aristotelian logic. But in African cosmology, arguing on the strength of African duality theory of OGBONNANYA 2022 and IJIOMAH 2011, the two worlds could permit a thing to be physical and metaphysical. The fact that a thing is not within the realms of the physical does not mean that it cannot play a vital role in achieving a significant result in the physical, if orchestrated in the spiritual realm, since there is a connection between the two worlds. All these are born out of the connectedness that exists between the two worlds. On the strength of the argument of the connectedness of the two worlds based on African duality theory, African Logic does not emphasize contradiction but contraries. It uses contraries because every reality it treats every reality as relevant to each other. Even in African way of living with each other, complementarity is emphasized among and with everyone.

This research examined and Analysed African Logic as the only means to understand the African way of life while critically pointing out the activities of Africans in order to know how they operate for their reasoning to be well known and understood.

2. Literature review

2.1. Why African logic

The systematic study of the way people reason, shows the ability to comprehend and handle the affairs of such people. Therefore, the basic notion of Logic generally, enables the systematic understanding of humans. It enables one to be able to apply human knowledge and experience in any circumstance or situation one is faced with. This study of the African people and how they interact cannot be understood using Western Logic. Western Logic does not understand and has not done justice to African world-views. Contradictions are promoted as opposite in western logic (example, a man cannot be human and still be spirit or ghost) whereas, within the African world-view, it is contraries that can complement each other and mutual co-exist (example, African Logic can accommodate a situation where a spirit or ghost can manipulate inform of humans in the physical world).

African Logic is the only reason Africans can comfortably account for the relationship between spirit and human, truth and false in a symbiotic manner. It refers to the balancing and stability gotten when realities come together. According to Ijiomah (2004: 119) "it results in unity of contraries harmonising each other". When there is a balancing in reality there is functionalism but when one overshadows one, there is problem and not Harmonious co-existence. Through African Logic, people are made aware of the African ontology that explains how Africans have and believe in the hierarchy of beings. At the Apex is the supreme God called *Chukwu* in Igbo, *Allah* in Hausa, *Nyame* in Akan culture of Ghana and many more. Next in the rank are ancestors, which Africans considered as those who have lived well and died and now rest with their maker. They are ruling forces

and protectors of the community (Ijiomah 2004). Thus, for the Africans, nothing happens by chance “every change is caused.” (Ozumba. 2004: 17). Considering this, it avers that Africans sought for explanation in all that happens to them since there is nothing that lacks no cause. Almost every action is either caused physically or spiritually, thereby, linking the need for the ancestors to intercede and show the living when it is spiritually influenced. Hence, the idea of chance is reflective of ignorance. Also “what we call chance is our ignorance of the series of actions and reactions that have given rise to the given event” (Ozumba. 2004: 17). With Western Logic, these realities could be termed fallacious and unreasonable especially if there are empirically not connecting, whereas, if viewed from the African worldview and way of life, there is a connection that accounts for that. This also can suffice for causation in African Philosophy. African Logic becomes a sine-qua-non and ready tool in dealing with the African world’s reality and beliefs.

Airoboman and Odia (2019) used communication possibility as a ground to justify African logic and rationality. “Communication is made easy and possible due to the capability of logic and rationality. Humans can have organized language, and proper use of words to enhance and enable communication due to their Logic” (Airoboman & Odia 2019). The reason for common meaning in language. It helps and makes settlement of disputes easy. The ability and wisdom of men to resolve their differences and live in an organized way are a proof that they have Logic. Both Consistency and coherency are necessary tools to make this possible. We cannot claim to understand Language or say it has meaning if it is not logically structured, organized and systematized. This is also why humans are capable of concept formations and classifications. This shows that logic is context or culture-dependent, hence the need for African Logic to be employed when dealing with Africans (Airoboman & Odia. 2019).

2.2. The nature of African logic: A critical reflection

When we term it African Logic, it does not imply a way of reasoning from Africans alone but it demonstrates a method through which realities within African perspectives could be understood. It helps to open the rationality of those who do not know African values and ontology to be well orientated. Importantly, all proponents of African Logic, aver it as a system that complements realities. According to Asouzu in Ibunanyidanda (2007: 120), “everything that exist, serves as a missing link to reality”, which connotes complementarity. In Ijiomah’s (2004) book titled *Harmonious Monism*, it argues for complementarity in African world view and existence. By complementarity, it refers to the balance and stability gotten when realities come together. It results in “unity of contraries harmonising each other.” In a work titled *Ezumezu*, Chimakonam (2019: 107), avers that in African logic

Where two standard values are treated as sub-contraries rather than contradictories as in Lukasiewicz and Kleene, the complementary mode where they converge becomes a truth glut. This is because the complementary mode (ezumezu) is a distinct value in itself where the other two standard values ezu and izu converge and complement. But this convergence does not lead to a synthesis where the two values lose their identities, it is a tentative mode which disintegrates by means of a mechanism that is conversational and gives each truth based on the different modes and context.

Unlike the Western Logic, there is a law that permits complementarity or harmonious bond or opposing values acting or serving as a missing link to every reality that exist in African Logic (Asouzu. 2007: 120). To every reality that may appear as opposing or contradicting, in African Logic, emphasis is not on contradiction because it is seen as non-contradictory, because such a reality has the ability to suffice for another role on reality.

The structure and nature of African Logic are that which tolerate contextualism. African Logic treats every action in reality within the context or situation such action is based on found. This situation could be family based, community based or traditionally based. Due to this contextual approach, some situations and

circumstances where T can be true in a particular context, in another, that same T can be False, showing the dynamic influence the spirit world and Physical world have on each other. According to Chimakonam (2019: 106), "Strict semantic evaluations in African thought are read contextually ... In contextual semantics, that which is true; is true only in a context, it could be false in another". Contrary to the Western world-view, it is against Contradiction Law which holds that: A cannot be A and B at the same time. It explains reality only from two varying points. A thing is either A or it is not A, as different from the African system.

African Logic accommodates the supernatural realities, transcendental realities and physical realities. It presents them in a manner and nature that reality is one and indivisible. From the argument of Harmonious Monism as a system of African Logic, there is a communal relationship between the spiritual and the physical. "For the Africans, each reality, whether spiritual or physical, appears and disappears into and takes the nature of the opposite reality" (Ijiomah, 2014: 118), thereby confirming the relationship of these two worlds in the Yoruba cosmology as a unifying world where both realities complement each other in their actions. According to Oladipo (2002: 149-158) holds that:

In spite of its supernatural underpinning...nature for the Yoruba people is an integrated whole in which all forces and power-human and non-human, physical and quasi-physical-interact in a manually re-enforcing manner. There is thus in Yoruba worldview, like that of many other African people, a sense of order and continuity of experience. It is this sense which underpins the people's being that everything is ultimate explicable in both the animate and inanimate realms.

In African ontology, Africans believe in the hierarchy of beings and the existence of spirits even in the manifestation of affairs in the physical world. This is the extent to which African Logic uses the relationship between the physical and spiritual worlds to relate the complementary roles of both physical and spiritual realities.

The views by different African philosophers on African Logic would assist readers to digest without difficulty the nature and structure of African Logic. "The Possibility of African Logic" as written by Etuk (2002: 112), intelligently raised salient issues in form of a rhetorical question, opening up what African Logic involves. The author says:

Could logic be in superstition and myths and folk tales and oral traditions and religious rituals which are common features of Africa? Perhaps not exactly in that crude sense; but then that is the reason why this paper is flying a kite. For it is my desire to stimulate the thinking of African philosophers (by which I mean philosophers of African origin, rather than scholars who specialize on African philosophy) along the lines of whether or not there is African logic (Etuk, 2002: 103-112).

Etuk's position though rhetorical, raises attention towards what and how African Logic laws work. Etuk is been understood from this statement that there is African Logic which is a system of right reason based on the African ontology and Metaphysics that can account for and provide understanding to folktales, oral traditions and religious rituals. Etuk's position answers the questions of those who ask if there is African logic, as well as explains to them, how African logic takes into cognizance traditional values and tales in building African Logic. Although one begins to ask if every ethnic group may have its logic since, every ethnic group has its tradition. In response to this, it is necessary to note that African Logic, considers those basics that cuts across all African cultures and ontology to be able to have her unique logic.

Also, Asouzu (2007: 311) proposes that African Logic is complementary rather than contradictory in nature. "This is because they are firmly anchored on the one indivisible principle of non-contradiction; a principle that shares the character of being in its essential dynamism as it is expressible as missing links". This argument of complementarity, points out that the nature of African Logic varies from the bifurcating Aristotelian logic

(Asouzu: 310) that emphasizes contradiction. Also, every reality is a missing link of reality. Missing link shows that no one reality opposes the other. It explains that all realities are necessary in existence. Thus,

Interesting point of Asouzu's complementary reflection is that it can be applied systematically in all life aspects, be it theoretically and practically, in metaphysics, science, technology, in ethics, in epistemology, logic, in politics, in religion, in Law, in International relations, in situations of dialogue and polylog, in in negotiation etc. in all these areas, one is concerned with understanding being in its essentiality as something fundamentally complementary in constitution. Such understanding is the capacity of the mind to intuit missing links in complementary harmonious relationship in view of the attainment of the joy of being (Asouzu, 2007: 311).

This complementary view of Asouzu, possibly clarifies justifications for the harmony that exists in African logic. It talks about contraries between values that do not fit into the same circumstance instead of as contradiction. Discussing the dynamism of African Logic and accommodative nature of African logic, this research accepts that truth and false, complement and African Logic character content dependence, can be false or true. It is in these contraries that African logic is seen as dynamic and unique as the best system to account for Africans reasoning. More so,

In Ezumezu logic where two standard values are treated as sub-contraries rather than contradictories as in Lukasiewicz and Kleene, the complementary mode where they converge becomes a truth glut. This is because the complementary mode (ezumezu) is a distinct value in itself where the other two standard values ezu and izu converge and complement. But this convergence does not lead to a synthesis where the two values lose their identities, it is a tentative mode which disintegrates by means of a conversational mechanism called creative struggle to re-instate each truth value in their different contextual modes. The interpretation of the third value is the "complement" or "complemented" and is read roughly as 'it is known that it could be both true and false' (Chimakonam. 2019: 106).

This uniqueness of Ezumezu and African Logic complementarity at large, shows the tripartite nature of African Logic. This system of reason is hinged on the communal nature of life Africans encourage and teach. More so, it explains that even in its complementary form, where value T (human) and value F (Spirit) at some point can harmonize, it does not reap them off as independent standard value T or value F. Consequently, since Aristotle's Metaphysics, the problem of contradiction arose in Western logic and discourse, scholars need to be on the known that, this position of Aristotle is not to be used in all cases and culture. While Western logic consider contradiction as false and as unable to be true, this research, avers that if contradictions arise from either Yes or No situations in the Western logic, African Logic contextually, provides reasons for explanation in situation of this kind, in some contexts. Also, there is no room for a Yes or No in some context because some realities have multi-dimensional roles there operate and play. Therefore, considering a variable as unacceptable fails to point out the role of complementarity such a value has in reality. For Kellen (2020: 32), "certain logical paradoxes demonstrate that some contradictions are not so easily dismissed as merely false, an Idea that Eastern philosophical traditions have successfully proven".

According to Iroegbu (2004: 135), "the logic question in African philosophy must address specific African conceptual framework that is different from Western". This framework is the salient point that must be considered in dealing with African Logic. Therefore, folktales, oral traditions in Africa also have contributed to the messages in African culture and history. Hence, when these frameworks are well grasped in African Logic, the means and manner of explaining African activities without bias, is possible. Explaining more, Uduma (2009: 280) argues that "logic is an indispensable and basic appurtenance of African world view. Any proper and

genuine question raised around African philosophy must therefore admit that Logic is a fundamental aspect of African thought”.

From the foregoing, it is deduced that African logic just like Western or Aristotelian Logic, is a systematic and organised way of reason. It is the method through which the right reason is understood and it stems from the world view of such people. In difference, African Logic is more accommodating rather than opposing. African Logic emphasizes the place of convergence more than the opposing or contradicting aspect. Thus, the central point of African Logic is that it is complementary in nature. African Logic like any other logic has considered carefully the African world view and ontology of the African people to be able to explain without fallacies reasons for occurrences in African cosmology.

The belief in spirits and supernatural realities and their ability to play a role even in this physical world, shows the communal and inter-connectedness that exist in the African cosmology. In circumstances of this nature, without the third value of complementarity as used by Asouzu (2007: 311), or Ijiomah's Harmonious Monism (2014: 120) or the sub-contraries that is known as Ezumezu in Chimakonam's (2019: 109) postulations. The two valued logic of Aristotle, would run into crises because it would be unable to explain such realities. Hence, to be able to understand the African realities, one needs to know how African world view and ontology operate. It is through this that African Logic bears its relevance and essence.

Individuals like Hegel has argued against African logic not existing because Hegel feels Africa has no philosophy; Omatade citing Hegel explains that “Africa is not among Hegel's four cultures or civilization. From Hegel's perspective, Africa is said to be unhistorical; undeveloped spirit-still involved in the conditions of mere nature, devoid of morality, religions and political constitution” (Omatade, 2015: 19-43). But porous as such a thought would be ascribed to Africans. African Logic is as old as the conception of the relationship between philosophy and logic. Since logic is an essential branch of philosophy, the existence of regional philosophies implies the existence of regional logic. Thus the existence of African Philosophy suggests the possibility of African Logic since the way of life of the African people is their philosophy and world view. How then can African Logic be justified as coming from African world view?

In this work titled “the Possibility of African Logic”, explanation of how African Logic is inspired by the success story of the African philosophy, since “African philosophy has come to stay, if not of age”; and logic is an indispensable element of philosophy, accounts for the possibility of African logic (Etuk, 2002: 98-99). As such, there is or should be African Logic and it is found within the context of the Africans world view. A good grasp of this point is that formal logic, just like mathematics is a universal science. Given this, one can validly conclude that there is more to logic than formal logic. Secondly, the author argued in support of African Logic both on the application of the principles of logic to peculiar issues in Africa. The African world view encompasses how the Africans solve their problems, carryout their communicative activities and lots more (Etuk, 2002: 112).

In Uduma's work (2009) titled, “Can There Be an African Logic?”, the question of African Logic from two different perspectives is handled; In the first sense, Uduma sees the questions as to if there can be African Logic, as the question of the rationality of Africans. In the second sense, Uduma, sees it as the question of a Peculiar African Logic. The study maintains that the question of African Logic as a question of the rationality of Africans, that is, the ability of Africans to think coherently, argue consistently, or judge soundly is inseparable from the question of African Philosophy. In this connection, the emergence of African Philosophy necessarily crucifies and buries the question of African Logic. Hence to talk of the question of African Logic today is intellectually un-enlightening. Furthermore:

Today the question of African philosophy is obviously no longer that of whether it exists or not; even for those who would ordinarily hesitates to acknowledge its existence, it has gradually dawned on all that at least the robust debate as to the existence of African philosophy in a rather undeniable sense created African philosophy... The point here there

is no need to raise the question of African logic at this time when the question of the existence of African philosophy has been settled (Uduma, 2009: 281).

The point of prominent relief here is that the Uduma sees the question of the rationality of Africans as a sort of intellectual disquiet. On the strength of this, Anand (2016) argued strongly that the notion of teaching logic using only Western books and completely ignoring contributions from non-western books, shows the lack of comprehensive thoughts in such teaching. Therefore, the study unequivocally asserts that “logic is an indispensable and basic appurtenance of African worldview” (Uduma, 2009: 281).” Here after, the author proceeds to address the second sense of the question, the question of a peculiar African Logic:

The second limb centers around the rather jingoistic driven assertion of peculiar African logic. Horton... had argued that all though the main processes of inference known to modern man are deployed in African traditional thought either in the maintenance of the established world view ... or in its elaboration or modification... Such processes are deployed in an essentially unreflective manner. This was wont to elicit some jingoistic passion from some African philosophers... For such jingoistic driven philosophers, from the assertion that there exists African philosophy, it became necessary that there is a peculiar African logic (Uduma. 2009: 280-281).

Africans are capable of making deductions and inferences, articulating their views and ideas, organizing reality and making nature intelligible. Inference has been practised ever since the beginning of the world, by every competent human being. It cannot be doubted that the African indigenes even though they never had documented “academic logic” works, were not able to arrive at a valid conclusion; One, therefore cannot deny the existence of logic in the African worldview.

It shows that logic is an inherent human capacity. Every normal human being in every culture or “race” has the natural capacity to think logically and the structure or form of valid argument as well as the rules of formal inference, are universally the same. This view admits that there is African Logic in the sense that Africans have methods and approach to life that is peculiar to their culture and values. If it is accepted that philosophy is born out of culture or influenced by culture, then, Africans have the philosophy and African Logic is the best way to assess the African people.

3. Contribution of the study

In line with the arguments posited in this study, there is no gain in asking if there is African Logic because if Africans have culture and worldview, then, they have their Logic since philosophy and logic are born out of the people’s culture and world view. Consequent to this, the nature of African logic is that which promotes contraries rather than contradiction because Africans are known for complementarity and every reality having a role to play as it concerns another reality. This work does not refute Western Logic, nor does it argue against Western Logic having no role it can play in Africa. Instead, this study holds that one cannot use Western Logic to explain completely African worldview and thoughts. It calls for the use of African Logic that is born out of the African culture, to be used in explaining events and realities as there occur in African worldview. Through this means, then, one can comprehend completely the happenings within those people that have the same worldview. As a result of things of this kind, in 1962, Kwame Nkrumah instituted African studies in University of Ghana which he pursued for materialisation in other African Universities. His intention was to promote African knowledge and creation of African nationalist identity through the study of African Logic. Thus, for a proper understanding of how people reason, their thoughts too must be considered.

Finally, African Logic accommodates the physical and spiritual worlds as argued in earlier. This enables them to argue for ancestors, spirits and supernatural realities that transcend the physical world while the physical worlds consist of the living, where we are now. Thus, African Logic holds that there is a relationship

between the physical and spiritual world and these two worlds have connections. It accounts for why Africans can communicate with the spiritual and can also explain the roles their ancestors play on them the living. By so doing, there exists this link between the two worlds though separate in their dealings. This, Western Logic may not be able to account for.

4. Conclusion

Reading from different scholars and their systematic way of reasoning for the Africans, it is observed that African Logic is a system of reasoning that accommodates and unites. African Logic deals more with the complementary roles than the opposing roles. Hence, African scholars' notions about three-valued system of logic and this third value, plays a complementary role. They also accept that African's world-view and ontology differ from that of the West as such, not all about the western Logic can account for happenings in Africa existence. This is possible too because Africans generally hold and believe in communalism as a way of life and this communal living among them, follows even their ancestors and spirits. Drawing from this, this research holds that African Logic in its strict sense is broader in scope since it can account for the theory of causation in African Metaphysics as well give insights as to African reality in its totality. It accommodates both the physical realities and transcendental realities. It does not emphasize contradiction instead it promotes contraries hence, the reason for complementarity. It accepts situations where both T and F can unify to form reality. In this understanding every reality serving as a missing link of another reality is understood.

African Logic is dynamic, harmonious and accommodating. It can be seen as a method of the African people, as well as their systematic principles in the ways of African thoughts. It helps to explain the principle of causation in African metaphysics. Through this method, the role of seers, diviners and those who are considered as representative of the gods within the African metaphysics, can explain that which may not be understood at physical level of existence.

References

1. Aristotle. History of Logic. *Encyclopedia Britannica*. Retrieved from www.britannica.com
2. Airoboman, F., & Odia S. (2019). Can there be an African logic? In *Journal of Philosophy and Culture A Journal of the Department of Classics and Philosophy*, University of Ibadan Press.
3. Asouzu, I. (2007). *Ibuanyidanda New complementary ontology*, Transaction Publishers Rutgers University: Deutschland.
4. Anand J. V. (2016). Does critical thinking and logic education have a Western bias? The case of the Nyaya school of classical Indian philosophy In *Journal of Philosophy of Education*. 51(1). 132-160. <https://doi.org/10.1111/1467-9752.12189>.
5. Chimakonam, J. O. (2019). *Ezumezu: A System of Logic for African Philosophy and Studies*, New York: Springer. New York.
6. Etuk, U. (2002). The Possibility of African Logic. In *The Third Way in African Philosophy: Essays in Honour of Kwasi Wiredu*. Olusegun Oladipo Ed. Hope Publication: Ibadan.
7. Gottlieb, P. (2019). "Aristotle on Non-Contradiction." In *Stanford Encyclopedia of Philosophy*. Retrieved from www.plato.stanford.edu/entries.
8. Ijiomah, C. (2014). *Harmonious Monism*. Jochrisam Publishers: Calabar.
9. Ogbonnaya, L. U. (2002). The Question of the Nature of God from the African Place. Retrieved from DOI://dx.doi.org/10.4314/ft.v11i1.8.115-128
10. Oladipo, O. (2002). *The Third Way in African Philosophy: Essays in Honour of Kwasi Wiredu*. Olusegun Oladipo Ed. Hope Publication: Ibadan.

11. Omotade, A. (2015). "Critical Notes on Hegel's Treatment of Africa" In *Ogirisi: a new journal of African Studies* (11). P.19-43. Retrieved from <http://dx.doi.org/10.4314/org.v11i1.2>
12. Ozumba, G. (2004). "African Metaphysics." *A Colloquium on African Philosophy*. vol. 2. Abba Press: Calabar.
13. Iroegbu, P. (1994). *Enwisdomization and African Philosophy*. International University Press: Owerri.
14. "Laws of thought" in *Encyclopaedia Britannica*. Retrieved from www.britannica.com
15. Quinn, K. (2016). Western Logic has held Contradictions as false for Centuries. Is that Wrong? An Interview. Retrieved from <https://aeon.co>
16. Uduma, O. U. (2009) "Can There be Logic? [From Footmarks to Landmarks on African Philosophy], Andrew Uduigwomen Ed. Obaroh and Ogninaka Publishers: Lagos.
17. ... (2009). *Logic as an Element of Culture: In Defense of Logic in African Traditional Thought*. International Journal of Research in the Humanities: Drumspeak.
18. Wiredu, Kwasi. (2004). *Introduction: African Philosophy in our Time. A Companion to African Philosophy*, Blackwell Publishing: Oxford.



This Article is distributed under a Creative Common [Attribution \(CC BY-SA 4.0\) International License](https://creativecommons.org/licenses/by-sa/4.0/). Copyright (c), 2022 by the author/s.

