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**BEYOND IRREDENTISM AND JINGOISM: REFLECTIONS ON
THE NATURE OF LOGIC AND THE QUEST FOR (AN)
AFRICAN LOGIC**

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Abstract

In this article, I attempt once more to revisit the subject of logic in African philosophy or as some would have it, African logic. I discuss the views of those I call jingoists and irredentists and distance myself from them. I argue that there is logic in every human culture and language. I argue also that even the ancient Africans had logic in their languages. My goal is to show that logic as the tool of thought is universal and not culture-bound. To do this, I will investigate the nature of logic and then examine again the notion of (an) African logic before showing the relevance of logic to life. My method will be descriptive, prescriptive and analytical.

Keywords: Logic, African logic, Irredentism, Afrocentrism, jingoism, African philosophy

Introduction

It is the fecundate stimulation of the intellectual exchange between me and my former student and now collaborator Dr. Jonathan Chimakonam, his paradigmatic shift in his article “Why can’t there be an African Logic?” and my response in the article: “The Logic Question in African Philosophy: Between the horns of Irredentism and Jingoism” and his counter rejoinder “The Criteria Question in African Philosophy: Escape from the Horns of Jingoism and Afrocentrism” that is undoubtedly the immediate progenitor of this inaugural title.

Chimakonam had in employing the *ad lapidem* tactics, not only attacked me in my work on “Can there be an African Logic?” but also had given those who have not read any of my works the mendacious leverage to classify me as a universalist in the order of those who I classify as irredentists. Although he failed to wholeheartedly admit misreading me but his being jolted by my work (supra), in the anthology he edited, to escape from jingoism and Afrocentrism and the traditions of logic in African philosophy which my works on the logic question have inspired and elicited a reflection on my works and the discovery that since 1990 my position on the need to reconsider the scope of logic

to realign its radical alienation from its most primitive core and thereby promote a creative application of logic to issues that bear directly on human beings and their environment has not only been sustained; but resonates in my views on (1) the inadequacies of any finite-valued logic, hence the invitation to an infinite-valued logic; (2) logic as an element of culture, hence the inescapability of the existence of logic in African, and even pre-literate societies; (3) the need for a recourse to natural language to avoid the paradoxes because of its constructivist nature and immediate connection to reality; (4) the destitution of formal logic in pursuit of idealization and precision, hence the need to explore the workings of natural language and its applications to life's day-to-day situations.

My goal here is to address the subject of logic in African philosophy which is one of the most controversial issues in the African place. In doing this, I aim to clarify, deepen the arguments and sustain my position in the subject as well as open new vistas of research on African logic without being caught in the horns of irredentism and jingoism. The title in making room for the elaboration of the creative uses of logic underscores how a nuanced application of logic would facilitate a better appreciation of our today's environment and society.

The Nature of Logic

There is enormous difficulty in characterizing the nature and scope of logic. This difficulty locates primarily in the diverse subject matters with which logic has been associated. Thus, Morris Cohen avers "if by logic is meant a clear, accurate, and orderly intellectual procedure, then the subject of logic as presented in current textbooks, comes near being the most illogical in our chaotic curriculum".(1946, 1)

The near embarrassment of the subject of logic highlighted by Cohen is perhaps not surprising because according to Peirce, "Logic is a science which has not yet completed the stage of disputes concerning its first principles" (1960, 621)

To buttress the positions of Cohen and Peirce, it is notable that the first systematizer and captain of our world team of logicians, Aristotle did not give a clear account of the scope of logic. Thus, even though the works of his *Organon* constitute the contents of what later logicians studied as logic, his inability to give a clear and succinct account of what is the subject matter of logic helped in creating this problem. In fact, depending on which part of the *Organon* that later logicians intended to emphasize, Aristotle's works on logic offered a leading thread.

However, in this lecture, to understand the nature of logic, we begin with the American logician, W.V. O. Quine's (1908 – 2000),

famous quipping that logic is an old discipline, but since 1879 it has been a great one. The reference to 1879 is to the year of the publication of Gottlob Frege's *Begriffsschrift*, which marks (somewhat honorifically) the subordination of logic to mathematics, itself a kind of take-over and by the take-over most significant in understanding the nature of logic. The mathematicization of logic had been underway in fits and starts since the seventeenth century with Leibniz's *Characteristica Universalis*. Leibniz thinking in terms of a calculus that would help to solve all problems in a universal language, had hoped, that his *Characteristica Universalis* would in particular, help to decide any philosophical problem. Accordingly, he avers:

And when this comes (that is, when the idea of a universal language is realized) then two philosophers wanting to decide something will proceed as two calculators do. It will be enough for them to take pencils, go to their tablets, and say – ‘let us calculate’ (MURAWSKI 1989, 67)

Leibniz claims that he owed all his discoveries in mathematics exclusively to this perfect way of applying symbols, and the invention of the differential calculus was just an example of it. However, he did not succeed in realizing this idea of *characteristica universalis*. One of the reasons was that he treated logical forms intensionally rather than extensionally. This could not be reconciled with the attempt to formalize logic completely and transform it into a universal mathematics of utterly unqualified generality. Another source of difficulty was his conviction that the combination of symbols must be a necessary result of a detailed analysis of the whole human knowledge. Hence, he did not treat the choice of primitive fundamental notions as a matter of convention. This is because, his general, metaphysical conceptions induced a tendency to search for absolute simple and primitive concepts, the combinations of which would lead to the rich variety of notions.

However, by the middle of the nineteenth century the mathematicization of logic initiative had achieved considerable momentum especially in the works of two 19th century English mathematicians, George Boole and Augustus De Morgan. Their main achievement was the initiation of the so-called algebraization of logic. George Boole in his books: *Mathematical Analysis of Logic* (1847) and *An Investigation of the Laws of Thought* on which are founded the *Mathematical Theories of Logic and Probability* (1854) realized for the first time that the idea (already found in Leibniz) that algebraic formulas

can be used to express some logical relations; he wrote in *Mathematical Analysis of Logic* that:

One mustn't any longer connect logic with metaphysics but with mathematics ... The domain which comes into being as a result of the study of logic as an exact science is in fact the same as that which results from the study of Analysis (BOOLE 1965,12)

What was really new in Boole's approach was neither the attempt to apply the idea of calculus to logic nor the idea of a "non-quantitative calculus" - these ideas were already in Leibniz - but the clear description of the essence of this calculus, that is, of formalism. According to Boole, it is a procedure the validity of which does not depend upon the interpretation of the symbols, which are employed, but solely upon the laws of their combination. His leading idea was that transformations of expressions of the language depend not on the meaning (interpretation) of symbols, but only on laws of combining them, which are independent of any interpretations. Boole stressed clearly the possibility of interpreting the same formal system in different ways.

Augustus De Morgan, developing the syllogistic in his book *Formal Logic* (1847), formulated some ideas on the algebra of logic and the theory of relations. He proposed symbols to denote the converse of a relation, the contradictory relation and three ways in which two relations can be composed. His genius, however, is located not in the algebraization procedure, rather like Charles Peirce, it is located in the devising of a very precise notation for relational arguments. This effort is assessed in terms of impetus in creating a new quasi-mathematical kind of logical notation and analytical technique for use in mathematical derivations and demonstrations.

Perhaps, it is with the Italian mathematician Giuseppe Peano that the most important steps in the mathematicization of logic was, however, taken. He considered the problems of symbolism several times, advocated the use of symbolic language in mathematics and proposed a very good and clear symbolism. Many of his symbols were adopted, sometimes in slightly modified form, in modern logic and mathematics.

However, assuredly, it is in Frege's hands, that the mathematicization of logic is decidedly ironic. It instantiates the take-over model of interdisciplinarity. Its driving idea was logicism, the doctrine that all of arithmetic reduces without relevant loss to pure

quantification theory and set theory (themselves united by a common purpose). Frege (1848-1925) saw logicism as a corrective to Kant's doctrine of the synthetic apriority of arithmetic. Frege's purpose was to show against Kant (1724 -1804), that arithmetic was an analytic discipline. This he would do by finding an uncontestedly analytic discipline to which arithmetic would reduce. No one at the time seriously doubted that logic was indeed analytic. The problem was that by the time of the logicist programme, arithmetic had gone transfinite, a momentous turn to which the logic of the day could not begin to offer satisfactory accommodation. Thus was occasioned a remarkable transformation within logic itself, in which the old syllogistic logic was jettisoned in favour of innovations purpose-built to achieve the take-over of arithmetic. Let there be no mistake, modern logic was a take-over of the old logic, but it was motivated largely by the transfinite character of the new arithmetic, together with the desire to have a logic that would take arithmetic over. Frege, along with Charles Peirce (1839–1914) independently, would succeed in the one respect only to fail in the other. The new logic flourished, but the attempt to reduce arithmetic failed. This, too, is ironic. Much of the impulse to mathematize logic was to facilitate logic's appropriation of mathematics. With the failure of logicism, there was ample motivation to re-think the desirability of mathematizing logic. But, as things turned out, it was a transformation that stuck, and it set the stage for a century and more of rich attainment in that logic's four main precincts: set theory, proof theory, model theory and recursion theory.

Having taken the mathematical turn, logic detached itself from its historic mission of producing the theoretical core of a wholly general theory of argument and reasoning. It is indeed little wonder that the mathematical turn substantially fractured the enduring kinship between the ancient disciplines of law and logic. Aristotle, in *Topics* and *On Sophistical Refutations*, it is sure conceived of his theory of the syllogism as the theoretical core of a wholly general account of argument (WOODS 2001; WOODS and IRVINE 2004). By these lights, legal argumentation possesses a logical core. It was its preoccupation with argument that bound the logic of the syllogism to the law. Thus the mathematical turn was a transformation that engineered a radical alienation from logic's most primitive core of a wholly general theory of argument and reasoning, and correspondingly the two former friends, logic and law. For while legal argument and legal reasoning, which possesses the theoretical core of a wholly general theory of argument and reasoning, remain to this day context-sensitive, agent-oriented, concretely realized, non-demonstrative, highly nuanced and strikingly

tacit, the new logic was symbolic, formal, abstract, deductive, context-free, agent-insensitive, explicit and, most of all, mathematical.

In my article, “The Symbolic Nature Logic” (UDUMA 2008, 99-107) I therefore canvass that because for Peirce, Boole and Frege, like Leibniz before them logic is a system of principles which allow for valid inference in all kinds of subject matter, i.e. as the theory of relations, most logicians accordingly have taken as the central theme of logic the classification and articulation of the principles of formally valid inferences. This is what I expressed by elaborating the thesis that logic is a theory of formal inference, that is, logic is essentially formal in nature.

This thesis is anchored on the understanding that logic as the criteria for the evaluation of arguments has as its fundamental task the provision of standards or criteria to judge whether an argument is logically correct. This means that the logician is interested in the validity of arguments. And to say that an argument is valid is to say that if its premisses are true, then its conclusion must be true, an argument is therefore valid by virtue of its form. Because validity has to do with formal structures of an argument, logic as a study of conditions of validity is said to be a formal discipline. Here validity as a principle demands of the conclusions of an argument that it cannot fail to be true if the premisses are true, hence logic is said to be deductive.

The parallelism between validity and deduction is brought into sharper focus by the fact that a deductive argument is one in which the claim is made that some proposition (the conclusion) follows with strict necessity from some other proposition(s) (the premisses) – that is, that it would be inconsistent or self-contradictory to assert the premisses but deny the conclusion.

In this respect, if a deductive argument is to succeed in establishing the truth of its conclusion, two conditions must be met. First, the conclusion must in fact follow from the premisses, that is, the deduction of the conclusion from the premisses must be logically sound. Secondly, the premisses themselves must be true. Of these two conditions the logician as such is concerned only with the first; the second – the determination of the truth or falsity of the premisses, is the task of some special discipline or of common observation etc. appropriate to the subject matter of the argument. As Haack would put it,

we are, of course, usually interested in more than the validity of arguments: we are interested also, in whether their premisses are in fact true. A valid argument with none but true statements as premisses is

called a sound argument. The aim of the various empirical sciences is to determine the factual truth or probability of premisses. This is not the aim of the formal sciences of logic. Logic studies the conditions of validity – and no argument can be sound unless it is valid (1978, 12)

Because the formal structures of an argument determines the validity of an argument, logic as a formal science has as its subject formal validity. It studies the form of arguments in order to classify argument forms into two mutually exclusive and exhaustive divisions; one division being reserved for formally valid argument forms, the other division for formally invalid forms. The object of formal logic is thus obtained when logical techniques and methods are available by means of which it is possible, in principle, to identify all formally valid arguments as a formally valid, and formally invalid arguments as formally invalid.

The deductive inferences with which formal logic is concerned are therefore those for which validity depends not on any features of their subject matter but on their form or structure.

On this, Russell remarks that “it is not open to us, as logicians or pure mathematicians to mention anything at all, because if we do so, we introduce something irrelevant and not formal” (1975, 196-197). Using the classical syllogism, Russell points out that in saying “All men are mortal, Socrates is a man; Therefore Socrates is mortal”, what we mean to assert is only that the premisses imply the conclusion not that premisses and conclusion are actually true. According to him, even the most traditional logic points out that the actual truth of the premisses is irrelevant to logic. This is why he argues that the first change to be made in the syllogistic is to state syllogistic arguments in propositional form where we, instead of the categoric form, we now have the same argument couched as follows: “If all men are mortal and Socrates is a man, then Socrates is mortal”. The reason, according to him, is that it is intended to convey that the argument is valid in virtue of its form, not in virtue of the particular terms occurring in it.

The point is that: if we had omitted “Socrates is a man” from our premisses, we should have had a non-formal argument, only admissible because Socrates is in fact a man. In that case, we could not have generalized the argument. But when, as above, the argument is formal, nothing depends upon the terms that that occur in it. What this comes to is that we may as well substitute μ for men, \hat{a} for mortals, and x for Socrates where μ and \hat{a} are any classes whatever, and x is any individual. We then arrive at the statement: “No matter what possible

values x and μ and \hat{a} may have, if all μ s are \hat{a} s and x is an μ then x is an \hat{a} .

The point here is that if formal reasoning is what we are aiming at, we shall always arrive ultimately at the statement like the above, in which no actual things or properties are mentioned. For Russell this will happen through the mere desire not to waste our time proving in a particular case what can be proved generally.

What Russell is saying is that the absence of all mention of particular things or properties in logic is a necessary result of the fact that logic is purely formal.

As a consequence, logical principles must be formal – they represent the common characters of any subject matter from another. This Cohen and Nagel (1978: 185 – 187) remark is a virtue in abstraction rather than a fault. For in abstracting to form, we require knowledge of only the most general characters of a subject matter, that is, that which it has in common with everything else, in order to reason upon it validly. We need not, as it were, encumber our thought with useless intellectual baggage if we reason intelligently

It has in fact been asserted by some logicians that in point of fact there is no strictly logical difference between pure mathematics and deductive reasoning. What we usually call formal logic is simply the study of the most general portion of pure mathematics.

In concluding my article on “The Symbolic Nature of Logic”, I, however, trenchantly remarked: it is “significant to underscore here that our defense of the formal may the symbolic nature of logic does not commit us to the thesis that formal truth and symbolism are the only *de jure* concern of logic. The development of logic and its doctrines clearly show that the subject matter of logic has always been more extensive than formalism and symbolism” (UDUMA 2008, 105).

This is a recapitulation of my earlier position in my Ph.D. thesis: “Issues and Problems in Systems of Formal Logic: A Reconsideration of the Scope of Logic” where I vigorously canvassed that the formal theory of logic is a rude delimitation of the scope of logic.

The point on prominent relief, therefore, is that it is wrong to leave the impression that the mathematicization of logic has generated an uncontested monolith. Even as Frege’s and Russell’s logicistic projects were unfolding, alternative approaches were being developed. Intuitionism, many-valued and modal systems emerged as early alternatives of classical logic. Some of the beneficiaries of this advance were epistemological concepts, such as knowledge and belief (HINTIKKA 1962), and moral/legal concepts, such as obligation and permission, all of which were conceived of as modal operators by

analogy with the alethic modalities, necessity and possibility. Of particular relevance to legal studies is the modal logic of obligation and permission, deontic logic so-called (VON WRIGHT 1951)

Most of these non-classical developments reflect an interest in how reasoning is actually done. In the case of modal logic, there is a recognition that reasoning often pivots on what is taken as necessary or is assumed to be possible. Epistemic logic takes notice of the role that reasoning plays in the attainment of knowledge. Deontic logic examines the logical relations that connect the concepts of obligation and permission. Much of the motivation of many-valued logic arises from the vagueness of human languages. Even intuitionist logic was designed better to capture the structure of mathematical reasoning on the ground. None of these developments required, or aspired to, the abandonment of an abstractly mathematical methodology. This suggests that this kind of formal treatment is not intrinsically hostile to an interest in reasoning as it actually occurs. Even so, it could not be denied that a significant gap remained between the methodology and the subject matter, a gap which theorists attempted to bridge with the device of ideal models. (See GABBAY and WOODS2003a).

The gap considerably narrowed with the emergence of user-friendly logics in the second half of the past century. These developments arose from three principal sources, and largely independently of one another. From logic itself there flowed a rich pluralism of reinvigorated modal logics (KRIPKE1963; GABBAY 1976), logics of relevance (ANDERSON and BELNAP 1975), time and action logics (GABBAY et al., 1994) and other forms of dynamic logics (VAN BENTHEM 1996; GOCHET2002), situational logics (BARWISE and PERRY1983), game-theoretic logics (HINTIKKA and SANDU 1997), and systems of belief dynamics (ALCHOURON et al, 1985). Significant advances were also made by computer scientists and Artificial Intelligence theorists. Some of the best-known of these developments include default logics (REITER 1980), theories of defeasible reasoning (RESCHER 1976), non-monotonic reasoning, (SCHLECTA2004), logic programming, (PEREIRA 2002) and various extensions and adaptations of them to the imperatives of time-sensitive, resource-based cognitive agency (GINSBERG1987)

A third source has been the informal logic movement, comprising three over-lapping orientations. One is argumentation theory (JOHNSON 2000;JOHNSON and BLAIR 1994;JOHNSON and BLAIR 2002), and fallacy theory (HAMBLIN 1970;WOODS and WALTON 1989;WALTON 1995; WOODS2004). Completing the trio is dialogue-logic (HAMBLIN 1970;BARTH and KRABBE 1992;GABBAY and WOODS 2001a; 2001b).

We see in these various developments considerable encouragement of the idea that modernized systems might well be restored to logic's original purpose of investigating the structure(s) of real-life argumentative practice and reasoning as it actually occurs. It is an interesting rehabilitation, incorporating an unmistakable drift to the practical aspects of argument and inference.

This drift towards the practical is given further impetus by developments in cognitive psychology, especially those that take a mental models approach (JOHNSON-LAIRD and BRYNE 1991) or favour a bounded-rationality orientation (GIGERENZER and SELTEN 2001) towards cognition. Another stimulus is the practical logic of cognitive systems advanced in (GABBAY and WOODS 2003b; 2004b; 2005a).

These are important innovations both collectively and in their own right, and for Gabbay and Wood fully deserving of a name, to which they propose the new logic as a fitting baptism (2001a). The net resultant of these transformations, however, is that the alienation of a strictly mathematical and symbolic orientation from logic's original purpose of investigating the structure(s) of real-life argumentative practice and reasoning as it actually occurs, or as Gabbay and Woods would more specifically slant it, the give-and-take of legal thinking, is substantially mitigated.

It is therefore in the light of the foregoing that my reflections on the nature of logic yields the conviction that it is best realized by a recourse to the etymology of the word "logic". Thus in my book *Logic and Critical Thinking* I expound that the English word logic comes from the Greek word "*logos*" usually translated as "*word*". In essence, the terms "logic" and "word" have the same Greek root, *logos* and when we take what the New Testament Gospel of John 1:1-4 says, to wit:

In the beginning was the Word, and the Word was with God, and the Word was God. The same was in the beginning with God. All things were made by him; and without him was not anything made that was made. In him was life; and the life was the light of men.

It is evidently neither heretical nor philosophical eulogium to say that logic and God are synonyms, both have the implication of an underlying structure or purpose. God, in most revealed religions, is wontedly introduced as an underlying structure for all that is. Correspondingly, logic is the underlying sustaining power which coordinates and transforms fragmentary perceptions, concepts, words, emotions, judgements, etc. into a recognizable human act. Thus in my

article, “Logic as an Element of Culture: In Defense of Logic in African Traditional Thought” (2009), I maintain that although language represents the immediate translation of the logical world of the individual in a manner intelligible and concretely recognizable, it (language) would be impossible without logic; this is because it is the facility of logic that disposes one to maintain a balance in reality. That is, logic is what enables man to apprehend reality, hence strike a balance between himself and the world. In essence, logic is an ordered and systematic facility, an underlying structure that gives coherence and consistency to our manifold and fragmentary experiences. In and through logic, language provides a scheme of fundamental ways of thinking about the world. The organization and ordering of reality in and through logic, thus points to the fact that logic is not just an underlying structure but indeed, a natural disposition. Logic is thus an indispensable facility of the human personality. It is thus historically remarkable that human beings have certainly been thinking logically since before the dawn of recorded history, but the academic discipline named logic dates back only to the 4th century B.C. For it was then that the ancient Greek philosopher Aristotle wrote the first known treatises of logical theory and began teaching the first logic classes in history. The subject matter of the new academic subject was not specific reasoning about a particular topic, rather, it was the standards *any* reasoning must follow if it is to be good reasoning.

When therefore Aristotle says that logic is an *organon*, what is meant is that logic is an instrument of thought; and when we admit that logic is an instrument of thought, we thereby assert the fundamental nature of logic to human experience; that is, that logic is a fundamental dimension of the human personality. When we assert this, all we are saying is that human experiences are organized, analyzed and sustained by a certain intrinsic constitutive element. This element has a logical nature since it guarantees a homogeneous, coherent, systematic and ordered conception of reality. It is this logical element that gives meaning and content to our experiences, and this underlies our pre-ontological and pre-theoretical conception of logic.

The leading that logic is a not just an underlying structure but indeed a natural disposition and as such an indispensable facility of the human personality brings us to the second limb of our reflections: the quest for (an) African logic.

Reflections on the Quest for (an) African Logic

The Challenge of an African Identity: A Precursor to the Requirement for African Philosophy

In my paper “Between Universalism and Cultural Identity: Revisiting the Motivation for an African logic” (2010), the point is stressed that the dominant motivation for African logic unarguably is the identity requirement. In essence, it is the need for identity that engenders the professing of cultural relativism; cultural relativism becomes, as it were, a reply to the cultural uniformity (often stigmatized as cultural imperialism) that, it is claimed, dominant nations want to impose on the rest of the world through the affirmation of universality. Thus in a more nuanced sense the concept of particularism emerges from the assertion of the right to be different, indeed, cultural relativism is often bandied as guise for cultural identity.

It is, therefore, not surprising, that the quest for a distinctive African logic as indeed the more encompassing question of African philosophy has been more or less a quest for African identity.

It is, however, pertinent to underscore that today the question of African Philosophy is obviously no longer that of whether it exists or not; even for those who would ordinarily hesitate to acknowledge its existence, it has gradually dawned on all that at least the robust debate as to the existence or non-existence of African philosophy in a rather undeniable sense created African philosophy. It is also evident that in many respects, the responses to the question of African philosophy actually helped to determine the subject matter, nature, approach and, perhaps, goals of African philosophy (UDUMA 2009a, 122).

Indeed, what is called African philosophy today, largely emerged as reactions to the absolutist paradigm of Western philosophy which in assuring the universalization of Eurocentrism, not only created a truncated view of reality but disparaged the African as “mentally inferior,” “backward,” “uncivilised,” “barbarian” and the “savage” (UDUMA 2010).

In a sense, the motivation for the attachment of the adjective ‘African’ to philosophy is emotively rather than philosophically inspired. Afrocentrists like Alexis Kagame, Leopold Sedar Senghor had canvassed the position that there was (or at least there ought to be) a peculiar way of philosophizing common to all Africans (ONAH2002, 67). For sure, this was a tremendous route to the issue of African identity (OLELA 1998, 48-49). To establish African philosophy meant both the taking of a stand “for or against” the horrifying events and ideologies inflicted on Africa by its violent counter with the West (WAMBA-DIA-WAMBA 1991, 246) and a guise intended achieving intellectually what some African states sought to achieve by warfare

(SEREQUEBERHAN 1991, 11-14). Negritude as a philosophy derives its roots from such a counter-discourse about the African. Not only was there the urgency to liberate Africans themselves from European domination, Africans also fought to define that identity, to establish themselves as Africans. Both as a quest for freedom and an attempt to define their identity as Africans does the philosophical task of the pioneer African philosophers arise (ASIEGBU 2008, 39). Indeed, the problem of identity continues to determine all philosophizing about Africa. In this regard, the major preoccupation of African philosophers devolves around a single task: searching out answers to, and devising ways of attaining, the purposed goals of African people.

The tragedy, however, is that African philosophy and with it the quest for African logic is not inspired, like the origin of philosophy in intellectual history, by curiosity; it is inspired by frustration. It will be worthwhile here to reflect on this image of Africa that motivated the frustration inspired philosophy of identity; this is significant because only then would one be in position to appreciate how frustration can inspire philosophy. In doing this, we have note with shock that these ideas were inspired by philosophical assumptions of supposed critical and presumably reputable philosophers like Hume, Kant, Hegel and J. S. Mill.

The image of Africa that inspired the quest for African (philosophy) logic

In Richard Hakluyt's *Principal Navigation* (1589), the portrait of Africans is depicted as follows:

it is to be understood that the people which now inhabit the region of the coast of Guinea ... were in old times called Aethiopes and Nigritae, which we now call Moores, Moorens, or negroes, a people of beastly living, without a God, laws, religion or common wealth, and so scorched and vexed by the Sunne that in many places, they curse it when it riseth.

This kind of description of Africa made many Europeans who never visited the continent to have even more bizarre picture of the African man. One of them Thomax Dixon said "An African left to his own will roam at night and sleeps in the day, [his] speech has no word of love" another said "the life of an African is simple. He rolls on the ground like a log of wood, wakes up the following morning looking for what to eat or what would eat him" (LASISI 2011, 18).

As if these comments are not sufficiently disparaging, it is further reported of Africans that: “coloured people are quite frequently liable to sudden fits of madness brought about by excessive sexual indulgence or by abuse of narcotics” (LASISI, 1994, 8)

This derisive image of Africa is found in literature and poems. And according to Aristotle, “poetry is something more philosophical and more worth of serious attention than history, for while poetry is concerned with universal truths, history treats of particular facts”.

It is this worth of serious attention that invites us to the works of the English poet, James Thomson. He writes of Africa thus:

The parent sun himself
Seems o’ever this World of Slaves to tyrannize,
And with oppressive ray, the roseate bloom
Of beauty blasting, gives the gloomy hue
And features gross or, worse, to ruthless deeds.

(SUMMER1744, II 884-888)

Thomson also presented a derisive picture of Africa, a continent whose shores he never visited

What all that Africa’s golden rivers roll,
Her odorous woods and shinning ivory stores?
Ill-fated race! the softening arts of peace,
Whate’er the humanizing muses teach,
The godlike wisdom of the tempered breast,
Progressive truth, the patient force of thought
Investigation calm whose silent powers
Command the world, the light that leads to heaven,
Kind equal rule, the government of laws
And all-protecting freedom which alone
Sustains the name of dignity of man
These are not theirs [II 873 – 884]

Another English poet William Blake in his poem “The Little Black Boy” (1789) displays similar negative assumptions about Africa. The poem begins thus:

My mother bore me in the Southern wild
And I am black, but O! my soul is white;
White as an angel is the English child
But I am black, as if bereft of light...

At the end of the poem, the little black boy betrays a wish to be white, to serve and be like the English boy, for as he concludes “And then I’ll stand, and stroke his silver hair/and be like him and he will then love me.”

It is not surprising, Ogude (2006, 10) points out that the socially deprived little black child in a white community is psychologically

conditioned and naturally identifies the idea of the beautiful with being white. It is indeed instructive, to note that a pervasive negative black image dominated English and American children's books. Bob Dixon, in an article entitled "All Things White and Beautiful" gives a catalogue of children's books dating from the 18th century and right up to the 1970's. Worse still, when black dolls were eventually introduced in England and America, little or no care was taken about their looks. First, they were crudely made and second, supposedly Negroid characteristics were exaggerated so that the lips were ponderously thick and huge flat nose was adorned with wide gaping nostrils; and in children's stories the gollywogs and the sambos were models neither of beauty nor of virtue. Naturally, they were not welcome among Caucasian dolls. It is little wonder then that the incidence of identity rejection is high among black children in America and England (DIXON 1970, 142-144 as ctd. in OGUDE 2006).

It is notable that the usual status of the black person in Europe was that of a slave, the domestic servant or the itinerant beggar. Europeans naturally tended to suspect the intellectual capabilities of the African. All sorts of theories were propounded, including what was known as phrenology, a quasi-scientific idea that sought to relate the size and shape of the skull to the level of intelligence among the races. Needless to say, the Europeans concluded that the rather low position of the black man's forehead was a clear evidence of defective intellect. The belief was very well known in the 18th century and William Blake was clearly referring to this racist invention when he wrote "O African! Black African! (go, winged thought, widen his forehead)." (See BLAKE 1790 – 93). However, the most outrageous opinion on the subject of intelligence, came from an otherwise famous and respected philosopher, David Hume. In a clearly racist footnote in his essay, "Of National Characters," (1753), Hume writes:

I am apt to suspect the Negroes and in general all the other species of men (for there are four or five different kinds) to be naturally inferior to the whites. There never was a civilized nation of any other complexion than white, nor even any individual eminent either in action or speculation. No ingenious manufactures amongst them, no arts, no sciences. On the other hand, the most rude and barbarous of the whites, such as the ancient GERMANS, the present TARTARS, have still something eminent about them, in their valour, form of government, or some other particular. Such a uniform and constant difference could not happen, in so many countries and ages, if nature had not made an original distinction betwixt these breeds of men. Not to mention our colonies, there are

Negroe slaves dispersed all over EUROPE, of which none ever discovered any symptoms of ingenuity; tho' low people, without education, will start up amongst us, and distinguish themselves in every profession. In JAMAICA indeed they talk of one Negro as a man of parts and learning; but 'tis likely he is admired for very slender accomplishments, like a parrot, who speaks a few words plainly.

Ladies and gentlemen, it is indeed remarkable that during the last years of his life, Hume worked at correcting his works for a final and definitive edition which was published posthumously in 1777. In doing this, there is little doubt that Hume was stung by his critics (including Beattie) and he responded by revising the first two sentences of the footnote. Hume's editors, Thomas Hill Green and Thomas Hodge Grose, failed to include the revision. The missing revision, which has been recently discovered and published, makes a significant difference in the attitude conveyed by Hume's statement. Although the rest of the footnote remained unchanged from the original, Hume revised the opening two lines: "I am apt to suspect the Negroes to be naturally inferior to whites. There scarcely ever was a civilized nation of that complexion, nor even any individual eminent either in action or speculation."

For sure, the fact that Hume even revised the footnote proves that Hume did seriously reconsider the racist implications of his position. But his response was to abandon a polygenetic position and focus his attack solely on blacks, singling them out as an inferior group within the human family.

Efforts, however, to dismiss Hume's comments on black people as an aberrant instance of his shortsightedness that has nothing to do with his overall philosophy have been woeful. This is primarily because his racial law contributed to the subtext by which the idea of a human as slave was justified. His racial views were inextricably related to two of the major events of eighteenth-century European history – the enslavement of Africans and the subjugation and extermination of the people who occupied the overseas lands coveted by Europeans.

With the introduction of race-based slavery in 1650, and the gradual colonization of the New World, many European thinkers became systematically racist towards the people of the continent of Africa, as well as the inhabitants of the New World. The expansionist rhetoric of many European thinkers included rampant racial theories of Caucasian, Aryan, or Anglo-Saxon destiny. They adopted various racial theories of human nature which fit the historical exegeses. For them there were two options: both Africans and Indians were civilized and not

subject to enslavement and genocidal treatment by civilized Christians; or they were uncivilized and their lands were *terra nullius* and *terra incognita*, without local government and claimed by no one.

, the desire to exploit other people and continents inclined European thinkers to accept the idea that some men are by nature slaves, especially since the idea was acceptable to a man as important as David Hume. The development of racism based on skin color occurred, or at least intensified, simultaneously with the increasing importance of the New World colonies and the twin policies of enslavement of black Africans and the extermination of Native Americans.

Ladies and gentlemen, there were four major racialist theories concocted to meet the eighteenth century European conditions of a people who had emerged as colonizing, conquering “nations on a worldwide quest for wealth and power.” The first was that the mental and moral capacities of non-whites, especially Indians and Africans, differed significantly from those of whites (HUME 1854; LINNAEUS 1806). The second view held that being non-white was an essential defect: the normal, natural condition of man is whiteness, but due to unfortunate environmental factors, some people have lost their whiteness and with it, part of their human nature (BLUMENBACH 1969). A third theory was that some beings that look human are not really so, but are lower on the chain of being and represent a link between humans and apes (LONG 1970). And the fourth theory held that there are several theses, biblical and Darwinian, which separate human lines of creation and/or evolution, with Caucasian being the best.

It is interesting to note that while Kant assigns to the white race the capacity for rational character or moral dignity, non-whites are denied the same ability or at best assigned minimal (i.e. pseudo-rational-moral) abilities. The inferiority of non-whites derives from the presence of “phlogiston” in their blood, the simple fact that they are either black or coloured. Indeed, “while the black person is denied humanity and is therefore uncivilized, humanity accrues only to the superior European civilization which depicts humanity per excellence” (CASSIRER 1963, 11; EZE 1997, 121). And if black or coloured means non-humanity, it equally implies that the Negro lacks talent, that is, where talent is understood as an “essential natural ingredient for aptitude in higher rational and moral achievement” (EZE 1997, 126). To buttress his position, Kant quotes verbatim from David Hume’s “Essays on National Character”.

Mr. Hume challenges anyone to cite a simple example in which a Negro has shown talents, and

asserts that among the thousands of blacks who are transported elsewhere from their countries, although many of them have been set free, still not a single one was ever found who presented anything great in art or science or any other praiseworthy quality; even among the whites some continually rise aloft from the lowest rabble, and through superior gifts earn respect in the world. So fundamental is the difference between the two races of man, and it appears to be as great in regard to mental capacities as in colour (KANT1978).

This is short of saying that the Negro or Black is subhuman. To substantiate this latter point Kant drew up a hierarchical chart of the superior to the inferior hues of the skin as follows:

STEM GENUS: white brunette

First race, very blond (northern Europe), of damp cold.

Second race, Copper-Red (America), of dry cold.

Third race, Black (Senegambia), of dry heat.

Fourth race, Olive-Yellow (Indians), of dry heat (Kant 1978: 23).

The hierarchicization of the races is done with the belief that “white brunette” or “white” is the ideal colour or skin. All others are superior or inferior as they approximate whiteness. In fact, all other colours are simply degenerative development from the white original.

In a sense the *Critique of Pure Reason* is meant to demonstrate the transcendental and therefore the metaphysical and biological superiority of white over black. This might explain one of the essential reasons why Kant had to extol “reason” over “imagination”. Thus the recoil from delineating the Transcendental object X (which Kant refers to as the unknown root) and the theory of noumena (which Kant dismisses as complete emptiness), would have taken him away from eulogizing the Enlightenment spirit which he so much cherished and stoutly defended (See Kant 1964). In other words, the break into pure ontological analysis would have taken Kant away from the pettiness and prejudices of anthropologism (in this instance race analytic). But he rather chose to extol and propagate the supposedly white supremacy thesis. His choice, it is highly argued, must have been informed by the European colonization of the rest of the world and perhaps, the enslavement of the Negroid race through the Trans-Atlantic Slave Trade.

In his archetype classification of race, by which Kant means the “prefixed humanity inevitably inherited by nature, that is, that which is *a priori*, transcendently grounded and immutable” talent, rationality, humanity proper and therefore history is embodied in the European life or more precisely, in the European male. On the other hand, the “so-called sub-human, primitive, and characterological inferiority of the American Indian, the African, and the Asian is biologically and metaphysically inherited archetype” (KANT 1978, 124-25).

An equally famous pronouncement on the moral and intellectual faculties of the black man came from Thomas Jefferson, one of the better known founding fathers of the United States of America. In chapters 14 and 18 of his *Notes on the State of Virginia* (1787), Jefferson examined the whole system of slavery and put down his observations on the African slaves. Even though he was professedly a liberalist, his views further strengthened the foundation of racism in America; he said that the blacks and red races of America “have never yet been viewed by us as subjects of naturally history”. Perhaps, they are for him subjects of laboratory or zoological analysis. Even so Jefferson, albeit *prima facie* hesitantly, declares:

I advance it therefore as a suspicion only, that the blacks, whether originally a distinct race, or made distinct by time and circumstances, are inferior to the whites in the endowments both of body and mind. It is not against experience to suppose, that different species of the same genus, or varieties of the same species, may possess different qualification(192)

It is not surprising, therefore, that notwithstanding his touting of anti-slavery sentiments, he could not imagine an American society with a population of free black people. He thus proffers:

This unfortunate difference of colour and perhaps of faculty, is a powerful obstacle to the emancipation of these people. Among the Romans the emancipation required but one effort. The slaves, when free, can mix with, without staining the blood of his master. But with us a second is necessary, unknown to history. When freed, he is to be removed beyond the reach of mixture. (193)

This was an idea which the English adopted and led to the establishment of the black colony of Freetown in 1798. The Americans,

made a belated attempt to translate Jefferson's vision into reality and it was not until 1870 that the Republic of Liberia was founded for free Negro slaves. Ladies and gentlemen, it is one of those human ironies that in spite of his fear of miscegenation Jefferson left a brood of mulattoes, who were only recently accorded recognition as his descendants.

This racist prejudice is extended by Hegel, for whom, if perchance, the African has any iota of rationality to exhibit it certainly derives from the Asiatic or European world. This conclusion follows from the basic premise that Africa could not boast of any history, development, or any progress. According to Hegel, the "civilised {European} nation is conscious that the rights of barbarians {Africans} are unequal to its own and treats their autonomy as only a formality" (HEGEL 1773, 213 #351). Predatory and disquieting as these philosophies were in propping European supremacist ideology and traducing Africa's image, more heinous, rather, is the fact that the prejudgments and misconceptions were articulated and passed on as "transcendental wisdom" (SEREQUEBERHAN 1991, 3-28).

It is thus not surprising that colonization (which itself wrecked Africa of its history, heritage and culture) was conceived as a paternalistic mission, a civilizing adventure which was meant to make the African, hitherto conceived as a primate, a "civilized" human being. Indeed, for Hugh Trevor Roper "the only history which Africa has is the history of Europeans in her territory, noting that "the rest is darkness and darkness is not a subject of history" (MAZRUI 1981, 6). J. S. Mill (1912, Introduction) sums it up by saying that "despotism is a legitimate mode of government in dealing with Barbarians provided the end is to be their improvement". This is an obvious allusion to the white supremacy and black inferiority which for Mill justifies tyranny as a means to development.

In the face of such a traduced image of Africa the issue of identity was fundamental and a compelling one. As Basil Davidson (1991, 26) notes the debunking of this so-called supremacy of whites over blacks or the inferiority of blacks over whites is "the beginning of historiographical wisdom". This wisdom is creating an identity for Africa. The desire to argue against the prevalent negative discourse about Africa was thus compelling enough to ignite the need for African philosophy. Okere (1983, vii) thus submits that African philosophy indexes an attempt of the Africans to establish their identity.

The Motivation for an African Logic: The Sled of Irredentism

The point made about the truncating and disparaging of the African image invites us to make clarifications as to our usage of the term

irredentism in this lecture. The word irredentism as used in this lecture, even in my earlier usage(s) in discussing the logic question in African philosophy, is not meant to conform to the lexical or dictionary usage of the term, according to which the *American Heritage Dictionary of English Language*, for example defines irredentism as a national policy of advocating the acquisition of some region in another country by reason of common linguistic, cultural, historical, ethnic, or racial ties. The term irredentism is used stipulatively here to capture the iconoclastic distortion of history in an attempt to justify the intellectual annexation and subjugation of Africa by the Western world.

It has been underscored that logic, both historically and conventionally, is one of the core specialisms of philosophy, as such the question of African logic is tied to whether or not there is in the first place African philosophy. Unfortunately, after what has been christened the great debate in philosophy “it is unarguable that today it is generally accepted that there is a distinctive formal study called African philosophy” (Uduma 2004b, 173). This means 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 for it to overcome the tension that governed its emergency its corollary African Logic should be accepted even if it is only conceptually.

Indeed, African philosophy is an issue of identity with widespread ramifications. Thus, when African philosophy addresses the issue of African identity the issue of an African logic is wont to feature and in this context the remark by Robin Horton (1977, 65) to the effect that “logic (with epistemology) lies at the core of philosophy and their demonstrable absence in traditional Africa reinforces the obvious absence of philosophy in African traditional thought system”, exasperates the need for the desire to argue for an African logic as a way of showing that Africans are capable of exacting and rigorous intellectual display.

Horton (1977, 65) had rather equivocatively argued that although all 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. According to him, in Africa instead of employing intuition and ideas, we have a rich proliferation of the sort of thinking called *magical*. He thus concludes that in traditional Africa “people do not stop to ask what the irreducibly basic processes of inference are, or how they can be

justified. Situations which would provide such question simply do not arise” (65).

Indeed, for Horton (Horton 1967, 50 - 71), there is only one reality, and so there can only be one rationality as well. Societies that do not use the modern Western scientific method are ‘closed’ societies because they cannot imagine alternatives to their views of the world, and also because there is no real distinction between words and reality. Words are not reality in the modern society, and Horton argues that this allows the words to take on explanatory rather than magical characteristics. Kwasi Wiredu and D. A. Masolo agree with Horton’s commitment to the universality of reason, although both would argue that it is a mistake to compare Western science and traditional African thought.

The point on prominent relief here is that Western irredentists deny the existence of logic in Africa; they are of the opinion that the African is a sub-human that is mentally inferior to the West. This position is undeniably malicious and intellectually unfounded. For though, logic as the study of formal inference was non-existent in traditional Africa, the situation is not different in the West. Only trained logicians both in the West and Africa are at home with the rules of formal inference. What this comes to is that the non-existence of formal systems of logic does not in any way entail the absence of logic in Africa any less that it entails it in the West. We have shown in our reflections on logic that the mathematical turn fractured logic and that logic’s historic mission is that of producing the theoretical core of a wholly general theory of argument and reasoning. Thus, it smacks of only crude reductionism to assert the fundamentality of formalism and symbolism in logic and with it that formal truth and symbolism are the only dejure concern of logic. Formalism and symbolism do not in any way evince the creative usage of logic in our day-to-day applications of the subject. Assuredly, every human being is inherently endowed with the capacity to reason, think and act logically. Thus the description of the African as a being that is incapable of logical thought is derogatory and the denigration of African traditional thought was only wont to elicit some rather patriotic passion from some African philosophers, particularly when it became clear that even the irredentists and skeptics could no longer reasonably sustain the denial of African philosophy.

The Motivation for an African Logic: The lure of Jingoism

Preliminarily, the term "jingoism" dates from 1878. It was first used to describe the excessive (and misguided) patriotism of British politicians who wanted Britain to enter the Russo-Turkish war (on the side of the

Turks). The word comes from a popular song of the time, written by G. H. MacDermott, which included the following chorus:

We don't want to fight but by jingo if we do...

We've got the ships, we've got the men, and got the money too!

(See Uduma 2008)

In this lecture, we lean on this historical origin of the term jingoism; we see the patriotic call for a peculiar African logic as jingoistic notwithstanding the derisive image of Africa that, one could say, legitimizes such excessive patriotism. We see the patriotism as misguided because, as we shall soon show, it does really help our cause as Africans. We note, in this context, therefore, that in the attempt to assert that the African is as logical as the Caucasian, patriotic African professional philosophers argue for the relativity of logic, thus, the possibility of a *peculiar* African Logic. This is the case because the motivation for cultural identity is often tailored to imply a repudiation of universalism. For whereas cultural identity seeks to emphasize that human cognition always take place in definite and particular historical and socio-cultural contexts, universalism has always played down nay deemphasized those elements of cognition that are supposedly distinctive and unique to socio-cultural contexts. Therefore it is not surprising that the attempt to elucidate what constitutes a definite and distinctive logical cognition has in its wake led to the advocacy of a peculiar African logic.

Horton's position in stigmatizing traditional African thought as magical while canvassing a commitment to universality was in a sense an invitation to particularity, African philosophy was challenged to go into its culture to assure its logical structure. To square up to the need to establish an identity in an irredentist culture, from the assertion that there exists African philosophy, it became necessary that there is a peculiar African logic. To immediately dismiss this sentiment is to fail to recognize the uneven and asymmetrical development of world cultures, and that people need to cultivate a specific sense of belongingness in order to survive and enhance their positive identity and self-esteem. I recognize in this context that particularization is a locally oriented process which produces cultural meanings from local perspectives and concrete life experiences.

Peter Winch (1964, 307-324), however, takes the position that reason is inextricably linked to language and culture, and therefore (following Wittgenstein) it is possible to consider separate systems to be rational yet incommensurable. This sentiment seems implied in Helen Verran's recent *Science and an African Logic* when she suggests:

If we are to be convincing in asserting that mathematical objects have been constructed by people as they went about their living as social beings, more than the conditions of their production must be demonstrated. We must be able to show what people have used to accomplish the construction of these objects in their interactions with each other and the material world, and how they have used them (2001, 260, fn. 2).

The point is that culture situates a philosopher, limiting him to a specifically designed group and experience, problems, difficulties and presuppositions of a particular people. In addition, culture gives an orientation to his philosophy in so far as he seeks to provide ultimate answers to questions, and solutions to problems of a people of a particular culture. Since all philosophical discourse involves seeking answers to problems and issues, which a culture raises, then a culture is determinative of philosophy. As different and varied as cultures are, so also are the questions, answers and philosophies they generate (ASIEGBU 2008, 42).

Culture, however significant it is, remains limited to a specific region. The Western culture is different from African, American, or Asiatic cultures, for instance. The geographical particularity of a culture raises the issue of relativism of a philosophy tied to a particular culture. The different cultures, into which philosophies are inserted, imbue the various philosophies with a relativistic character. These cultures individualize those philosophies. A creative work in any philosophy, especially African philosophy, implies a solid grasp of the (African) culture. It entails a mastery of its lore of knowledge, symbols and symbolism, artefacts, legends and language, laws and customs, poetry and pastimes, celebrations and funerals, religion etc. Only through this way can African philosophers give meaning ultimately to African identity.

In essence, it is only through a particularistic logic, enriched and determinative by its culture can African philosophy avoid another European-generated approach to human understanding that focus in such an emphatic manner on elements that were said to be universal to human understanding because of concerns that such an overview could underrate or ignore elements to African cognition that were distinctive or perhaps even somehow unique.

It is thus not surprising that the quest for African identity has generated not only a defense of an African Philosophy but more

specifically a distinctive African logic. This is clearly articulated in Udo Etuk's proposal for enculturation of logic. According to him:

In proposing 'The Possibility of African Logic' this paper is clearly riding on the crest of what I take to be the success story in African philosophy. African Philosophy has come to stay, if not come of age. It has attained respectability.... Here we are barely settling the skirmish over whether or not there is any such thing as African Philosophy. And before that is settled, someone wants to stir the hornet's nest by raising a more exacting question, namely the possibility of African logic. Philosophers know the centrality of the role of logic in the study of philosophy, and that logic is the most exacting and rigorous of the philosophical disciplines. Indeed, some scholars are prepared to say that only logic and epistemology constitute philosophy properly speaking (ETUK 2002, 99-100).

It is certain that Etuk's sentiments above cannot be simply dismissed as a mere reaction to Horton's irredentism but needs to be appreciated as a natural disposition from an African confronted with blind and overarching Eurocentrism.. Thus it could be taken most charitably and in that context understood as inspired by some patriotism. However, I maintain that there is real need to rise above the identity problem and the attendant lure into jingoism and come to the realization that logic is universal, that there is no cultural or regional logic; the call for African logic is thus at best only tendentious (UDUMA 2009b; 2010). Regrettably, Okeke (2011) sees the insistence on the universality of logic as an extension or perhaps, a version of Western irredentism and as such dismisses my position as "pre-judgemental", "assumptive" and "nihilistic". But today Okeke have abandoned jingoistic approach. In obvious response to my article: "The Logic Question in African Philosophy: Between the Horns of Irredentism and Jingoism" in *Atolu Omalu*, he wrote "The Criteria Question in African Philosophy: Escape from the Horns of Jingoism and Afrocentrism" where he asserts:

I do not strictly advocate logic relativity or cultural logics that are border-sensitive and exclusivist. What I promote on the contrary is the reality that logical principles or the principles of rationality are *not essentially* straitjacketed and rigid as proposed by all the proponents of absolute logic. Yes, logic is

universal, no right-thinking philosopher should dispute that but the capacity of its principles varies from culture to culture (CHIMAKONAM 2015, 101).

It is interesting that Chimakonam has seen the need to rise above, or, in his words, escape from jingoism. This is quite fruitful because he is one the most promising emerging logicians in Nigeria and his escape is sure to help in creating traditions of logic in African Philosophy.

However, the critical point to note is that for the jingoists logic is culture bound; and since there is a peculiar African culture, there must be a peculiar African Logic. Therefore, every culture has its own peculiar logic and peculiar thought systems with peculiar rules of valid inference and sound judgement. The logical conclusion of this line of thought is that logic is relative. Hence to talk of the rules of universal valid inference discovered, abstracted and developed from the common thought process of human reason is unfounded and illegitimate.

I reject this position not because the motivation is ill-founded but because logic as a discipline is concerned with the structures or principles of thought; these structures of thought have no continental boundaries. The point here is that in deducing the enculturation of logic from the enculturation of philosophy, we must realize that enculturation of philosophy does not reduce philosophy to culture, and indeed while enculturation emphasizes particularity of philosophy, attention is drawn to the universality of philosophy: the different cultures, into which philosophies are inserted, imbue the various philosophies with a relativistic character. These cultures individualize those philosophies. But the “unity of human nature” stipulates “the universality of philosophy” (OKERE 1976, 11).

Although Okere’s (and other African universalists like Wiredu’s) position appears to anchor our position on the universality of logic, we are only committed to it to the extent that it shows that the enculturation of philosophy does not tantamount to the reduction of philosophy to culture. I am indeed hesitant to accept a universalist approach to philosophy, this is because unless it is underscored that African cultures may be different from those of the West in important ways that deserve to be highlighted, that would therefore be misrepresented by beginning from a presumption that cognition in Africa and the West are essentially the same. In fact, as Hallen (2003) points out “if the issue is cognition, of course the key question becomes just how different it has to be in order to be rated as qualitatively distinct”. Again there is the further consideration that, in the past, supposed ‘differences’ in African cognition were sometimes used as

evidence that Africa's indigenous intellectual heritage was thereby inferior to or less advanced than that of the West. This is one important reason, Hallen (2003) again points out, why African analytic and hermeneutic philosophers of a relativist persuasion have devoted so much time and effort to clarifying what they believe to be the accurate depiction of cognition in the African context. Further, unless we develop a coherent system of African philosophy, Africa would have nothing that is distinctively African and yet has inter-cultural significance. And of course, we talk of Western Philosophy, American Philosophy, etc meaning that regional Philosophies exist.

This hesitance, it must be made clear does not apply to logic; for logic albeit conventionally is contrived as a branch of philosophy, in its true essence, it is a tool (an *organon*, to use Aristotle's terminology), a propaedeutic to philosophy. What this means is that logic is an essential facility of inquiry and as such lies at the head of a ramified hierarchy of knowledge; it is like a laser, a tool whose best use is not illumination, but rather focus. A laser may not provide light for your home, but, like logic, its great power resides in its precision (UDUMA 2008, 42). The import here is that the philosopher uses the tool of logic to organize reality and render it intelligible; this explains why logic and mathematics work so well together: they are both independent from reality and both are tools that are used to help people make sense of the world. Logic's location in philosophy is thus because it is a method for comprehending the underlying structure of reason. Indeed, as we have already highlighted, Aristotle systematized logic as a method for comprehending the underlying structure of reason, which he saw as the motor that propelled human attempts to understand the universe in the widest possible terms. Thus, philosophy relies on logic to help provide explanations for what we see. The significance of this explanation is that logic by its propaedeutic role is not native to philosophy alone; indeed, all the various specialized disciplines rely on and do indeed apply logic for their research objectives, assumptions, proceedings, and conclusions (UDUMA 2004, ix). This explains why it is said that logic deals with the structures of thought.

The Universality of Logic

In this lecture I advocate going beyond the positions of both the irredentists and the jingoists because there are problems inherent in the two extreme positions. The point on prominent relief here is that, in as much as, the *pre-logicality* thesis of Western irredentists is theoretically unfounded, the logicality of Africans does not and cannot *ipso facto* imply the existence of a *peculiar* African Logic. Hence, the thesis of African jingoists that there is a *peculiar* African Logic is not only

misleading and erroneous but would, if stretched, be palpably repugnant and undesirable. It should be noted here that there is a difference between “African logic” and “an African logic”. The definite article “an” presupposes a peculiar African logic.

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. Even the most iconoclastic of those who deny the existence of African philosophy, more precisely the existence of African logic were tendentious enough to submit that all 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, but only adds that such processes are deployed in an essentially unreflective manner. The universality of logic is thus admitted even by the irredentists.

Horton does not deny that traditional people do not reason and do use logic ... He does insist that they do so in non-reflective, non-critical manner. Which would mean that such societies generally are not conscious ... of the logical structures, qua logical structures underlying their discourse (HALLEN 1977, 81-82).

And like Hallen, one cannot but ask: what is the transition that must be undergone in order for a process of thought to be regarded as critical or reflective? One notices here that Horton’s qualification is forced, it is a deliberate introduction to sustain, as it were, the distinction between the “civilized” and “uncivilized”, the “superiority” of Europe and “inferiority” of Africa. After all, it takes only some sort of training for one to be consciousness of logical structure qua structure. Even among the so called superior race, only those trained in logic can claim consciousness of logical structure qua structure. Horton’s distinction is thus vacuous or at best superfluous.

The universality of logic means that logic is a fundamental dimension of the human personality; and when I assert this, I am saying is that all human experiences are organized, analyzed and sustained by certain intrinsic constitutive element. This element has a logical nature since it guarantees a homogeneous systematic and ordered conception of

reality. It is the logical element which co-ordinates and transforms fragmentary perceptions, concepts, words, emotions, judgement, etc, into a recognizable human act. This is why it is said that logic is a disposition to fundamental ordered action, hence a characteristic of a self-conscious and responsible humans endowed with reason. It is in this sense that Momoh submits that the competent individual in any society is logical (2000, 186-192).

A good grasp of the foregoing analysis substantiates my position about the universality of logic. My position that logic is universal and as such a necessary element of every culture, including the African culture, fundamentally repudiates as well as distances me from the position of Western Irredentists. Yet it will be mistaken to equate my position with that of African Jingoists. For in so far as I subscribe to the thesis that there is African Logic or more appropriately, that there is logic in African cultures and as such traditional Africans are as logical as their Western counterparts, I am avowedly opposed of the call for any peculiar regional logic based on a peculiar thought system be it Western, African or Oriental. I therefore turn to pin-point my disagreement with African Jingoists.

In Lieu of a Conclusion: Against the Regionalization of Logic

When I say that logic is universal, I am committed to the view that logic is an element in, and of culture (UDUMA 2009c, 167-190). In saying this, what is meant is that the cultural experiences of a people cannot be meaningful unless they are organized or coordinated in language, an activity which itself presupposes a logical ability; logic and language are fundamental or central to organizing reality and thus a characteristic of all human societies. In other words, the cultural experiences of a people are embedded in human language, and language itself is the immediate translation of the logical world of the individual in a manner concretely recognizable. That is, logic is what makes language possible; the existence of culture presupposes the existence of logic. The assertion as to the existence of logic in all cultures does not, however, mean that logic is cultural in the sense that there are regional or cultural logic(s).

Yet it is by defending a cultural logic that Etuk, Ijiomah and Okeke as already highlighted, argue for a peculiar African logic. For example, for Ijiomah (1995, 11) "... if logic is a part of philosophy and... philosophy is culture bound, it follows necessarily that logic is culture bound" and for Etuk the "implicate" of domesticating and enculturating philosophy "will be that there has to be an African logic, if there is African philosophy (ETUK 2002, 100).

Etuk, it is clear was reacting to Horton's assertion that Africans instead of employing intuition and ideas, have a rich proliferation of the

sort of thinking called *magical*. From which he concludes that in traditional Africa “people do not stop to ask what the irreducibly basic processes of inference are, or how they can be justified”. Etuk submits that “philosophers know the centrality of the role of logic in the study of philosophy” and went further to ask whether we are “now going to suggest that there could possibly be logic in superstition and myths and folk-tales and oral traditions and religious rituals which are common features of Africa?” (2002, 100). He, of course, admits that while not accepting this in the “crude sense” but then that is the reason why he canvasses for a peculiar African logic (2002, 100).

While paying due sympathy, indeed positive considerations, to the exigencies that prompted cultural identity, I nevertheless canvass for a transcending of jingoism in arguing for a particularistic logic. It is failure to do this that forced Chimakonam and with him all those who still canvass for the regionalization of logic to confuse the socio-cultural application of the principles of logic with the nature and structure of logic. Thus in talking of whether or not there can be an African logic in the sense of a peculiar African structure of logic, it is my position that there is none. This is so because logic is universal with no continental boundaries. We, for sure can apply the principles of logic to different socio-cultural situations but we have no peculiar regional thought processes. Yes we talk of Chinese logic, Buddhist logic, Polish logic etc but these qualifications only indicate a kind of logical studies which are developed in China, by Buddha and in Poland; they do not denote logic in China or Poland, just as Aristotelian logic does not denote a logical structure peculiar to Aristotle. Of course, we do not talk of American logic, German Logic, British logic as we talk of American philosophy, German philosophy and British philosophy. We therefore should rather be concerned with what to contribute to the world growth of logic than dissipating energy arguing for a peculiar African logic.

It is thus not surprising that Nze in his assessment of William Amo (NZE 1990, 22) argues that “Amo was an African but there was nothing African in his syllogism, language and criticism except Amo the African philosopher”. For Nze, and plausibly so, the application of the principles of logic does not regionalize logic.

In illustrating the universality of the principles of logic, the claim that the "Law of Non-contradiction" also called 'either-or' logic is exclusively western logic while eastern philosophy uses something called the 'both-and' logic has been shown to be misleading and patently wrong. In *Proven Western Logic Vs. Flawed Eastern Logic* the story is told of a Christian apologist, author, and native of India, Ravi Zacharias who travels the world giving evidence for the Christian faith. Following a presentation on an American campus regarding the uniqueness of

Christ, Ravi was assailed by one of the university's professors for not understanding Eastern logic. During the Q&A period the professor charged, "Dr. Zacharias, your presentation about Christ claiming and proving to be the only way to salvation is wrong for people in India because you're using 'either-or' logic. In the East we don't use 'either-or' logic—that's Western. In the East we use 'both-and' logic. Ravi in rebutting the rather confused but insistent professor had asked, "Are you saying that when I'm in India, I must use either the 'both-and logic' or nothing else?" (Alleywayzalwayz 2009).

Ravi added, "even in India we look both ways before we cross the street because it is either me or the bus, not both of us!" Indeed, the either-or does seem to emerge. Although the point of illustration is that "everyone who tries to argue against the first principles of logic wind up sawing off the very limb upon which they sit", that one cannot deny the law of contradiction without running into difficulty, it makes pungent the point that structures of thought are not regionalized, they are rather universal. This is made unarguable by saying "Imagine if the professor had said, "Ravi, your math calculations are wrong in India because you're using Western math rather than Eastern math." Or suppose he had declared, "Ravi, your physics calculations don't apply to India because you're using Western gravity rather than Eastern gravity." We would immediately see the folly of the professor's reasoning" (Alleywayzalwayz 2009).

The stress thus is that notwithstanding the lure of particularism things work in the East just like they work everywhere else. In India, just like in the West, buses hurt when they hit you, $2+2=4$, and the same gravity keeps everyone on the ground. The structures of thought are the same for the West, the East and the African.

For sure there could be peculiar cultural African experiences where the principles of logic can be applied. The argument that the Igbo aphorism "ahu nze ebie okwu"(see UMEZINWA 2005,246-259) reflects a peculiar African logical structure is patently wrongheaded. Etuk (2002: 112) in discussing status factor as a peculiarly African logical structure tries to insinuate that Modus Ponens does not hold in African application of logical structures. Chimakonam (2011) was indeed vehement that "... modus ponens and indeed all the inferential rules which have material implication as major operator do not hold in African thought system". This is not just unfounded but plainly outrageous; would an Igbo man say "*O buru na ibiaghi ngwa-ngwa agam ahapu gi, I biara ngwa-nwa, Nkea putara na mu ga ahapu gi*" "If you do not come early, I will leave you, You came early, therefore, I will leave you". It is also true that status is factor in the West as it is in Africa. People have a natural inclination to skew the course of justice

depending on social strata. At even a more absurd level does it follow from Modus Ponens that America would preach liberal democracy and even make it a condition for assistance in Africa and most Third World countries and the same America is hobnobbing with King Fad of Saudi Arabia? Does this suggest that Modus Ponens does not work in the West?

What the Igbo aphorism admits, at best, is that Africans accept that contradiction does not have the meaning of absurdity. In this sense, Africans are more inclined to the dialectical conception of logic where everything is mediated and therefore everything is itself and at the same time not itself. This suggests that dialectical logic is one area where African cultural experiences will contribute to the world growth of logic. Africans must not bother themselves about formulating artificially regulated logistic languages. Logic is not exhausted in formal logic; indeed formal logic is only a tiny aspect of logic. The over emphasis on this tiny aspect of logic, it is no doubt, is where the problem lies. We thus need to be reminded that the world over we do not know of people who subject thinking to the regulated language of symbolic logic before knowing when someone is logical. There is indeed, no peculiar African logical structure. Thus although Etuk talks of affective logic being peculiarly African, one only appreciate it as both an extrusion and extension of Leopold Sedar Senghor's idea that the African was different but equal to that of Europeans and consisted of emotion rather than abstract reason. This is to say that affective motor is peculiarly African; for sure Africans can work on developing Affective logic that would not make it a peculiarly African category any less that deontic logic is not peculiarly European. Even if it is called African logic that does make it the logic in Africa, but only a kind of logical studies which is mainly developed in Africa. Likewise, we already pointed out, the expression Polish logic has never been used to denote logic in Poland, but a kind of logical studies which are mainly developed in Poland. I therefore subscribe to the position of Christian and Wes (2006a, 2006b, and 2007) that the claim that different people in different cultures have different thought processes lacks any substantial evidence be it anthropological, empirical, scientific or otherwise.

Though the jingoists think that they are doing Africans a favour by their attempts to foist a non-existent *peculiar* African logic/thought system that is distinct from the Western thought system and which does not obey the acknowledged universal rules of valid inference, but the success of their attempts will on the contrary prove the *pre-logicity thesis* of Western Irredentists right. This is because to argue for a peculiar African logic is to unwittingly argue, and this would be monstrous, that Africa has a different or peculiar system or systems of

thought from the rest of the world. Perhaps, it is this peculiar thought system that has put the economy and political systems in Africa where and how they are today. It will also flow from this that contemporary Africans acquired their ability to consciously/unconsciously observe the universal principles of valid inference nay, understand and evaluate other cultures after they have been *logicalized* and *humanized* by the West. This is why we must rise above jingoism to the realization that logic is universal, there are no regional logics. As Etuk (105) even admits “it would be just as silly to suggest that there can be an African logic as it would be to urge that there should be British or Indian Mathematics”. This does not mean that there is no logic in African philosophy or thought system, but that there is no peculiar African logic as indeed there is neither a Western nor Eastern logic. The distinction must be made between the application of principles of logic and the existence of a peculiar thought system. When we say logic is the essence of philosophy we are saying that logic is an underlying structure and this is the primordial, pre-theoretic and creative meaning of logic.

Mr. Vice-Chancellor sir, if we make this distinction clearly, it is obvious that the question today is not on the possibility of an (*peculiar*) African logic but on the development of viable traditions of logic in African philosophy and I am delighted that the criticisms and counter criticisms generated by the thesis I canvass have heralded an emerging new area of research in African philosophy namely, the discovery, systematization, development and progressive emendation of viable traditions of logic that can be used to evaluate issues and solve problems in Africa and beyond. Examples of such emerging traditions include Chris Ijiomah’s Harmonious Monism (2014), Asouzu’s Complementary/ Ibuanyidanda Logic (2013) and Jonathan Chimakonam’s Ezumezu Logic (2015). Some of these systems have of course received international appeal, but for these and many other systems to receive international reputation, we need to nurture, groom, fertilize, refine and further develop these traditions through incessant intellectual conversations and critical scrutiny. This is the core of my lecture today and the strain that informs my future research; it is the anchor of the work: “On Many Many Truths: Essays in Honour of C. S. Momoh” that I and Assoc. Prof. C. B. Okoro have just worked out.

The Relevance of Logic

There is no better way of concluding this lecture than to finally reflect on the relevance of logic, generally. In this connection, it is instructive that in my book *Modern Symbolic Logic* I expound that:

Logic is an essential facility of inquiry in both the sciences and humanities; (that) all the various specialized disciplines rely on and do indeed apply logic for their research objectives, assumptions, proceedings and conclusions. Any discipline that claims to, or aims at, describing some aspect of reality and allows for proof cannot succeed without logic. Logic, therefore, lies at the head of a ramified hierarchy of knowledge; it is an indispensable tool of knowledge co-ordination, and processing. (2004, ix)

I have also in elaborating that philosophy is logic and logic the foundation of knowledge as a whole, maintain that if we do not get logic right, we shall get nothing else right. That If truth is to be sought in every division of knowledge, we must, Sextus Empiricus say, "before all else, possess truth-worthy principles and methods for the discernment of truth"(See Uduma 2000: 138). In essence, because logic includes the theory of criteria and proofs, it is with this that we ought to make our beginnings, which means that logic is prior to all aspects of knowledge. Little wonder, Aristotle admonishes that before embarking on the study of anyscience one should receive some training in logic.

The following sections give a tip of the iceberg as to how logic is commonly applied.

Mathematics is tailor-made to use logic in all its power. In fact, logic is one of the three theoretical legs that mathematics stands on. (The other two are set theory and number theory). Logic and mathematics work so well together because they're both independent from reality and because they're tools that are used to help people make sense of the world. For example, reality may contain three oranges or four bananas, but the ideas of *three* and *four* are abstractions, even though they're abstractions that most people take for granted. Mathematics is made completely of such abstractions. When these abstractions get complicated – at the level of algebra, calculus, and beyond – logic can be called on to help bring order to their complexities. Mathematical ideas such as number, sum, fraction, and so on are clearly defined without exceptions. That's why statements about these ideas are much easier to verify than a statement about reality, such as "People are generally good at heart" or even "All ravens are black."

Science uses logic to a great advantage. Like mathematics, science uses abstractions to make sense of reality and then applies logic to these abstractions. The sciences attempt to understand reality by:

1. Reducing reality to a set of abstractions, called a model.

2. *Working within this model to reach a conclusion.*

3. *Applying this conclusion back to reality again.*

Logic is instrumental during the second step, and the conclusions that science attains are, not surprisingly, logical conclusions. This process is most successful when a good correlation exists between the model and reality and when the model lends itself well to the type of calculations that logic handles comfortably.

The areas of science that rely most heavily on logic and mathematics are the *quantifiable sciences*, such as physics, engineering, and chemistry. The *qualitative sciences* – biology, physiology, and medicine – use logic but with a bit less certainty.

Finally, the *social sciences* – such as psychology, sociology, and economics – are the sciences whose models bear the least direct correlation to reality, which means they tend to rely less on pure logic; nevertheless, because logic is fundamentally a method for comprehending the underlying structure of reason which propels human attempts to understand the universe in the widest possible terms, informal logic lies at the core of the social sciences and the humanities. The research objectives, assumptions, proceedings and conclusions of all disciplines rely and rest on logic. This we have explained is why logic is reputed to be at the head of a ramified hierarchy of all the sciences and indeed the most general description of reality.

Medicine used to be called the youngest science, but now that title has been handed over to computer science. A huge part of the success of the computer revolution rests firmly on logic. Every action your computer completes happens because of a complex structure of logical instructions. At the hardware level – the physical structure of the machine – logic is instrumental in the design of complex circuits that make the computer possible. And, at the software level – the programs that make computers useful – computer languages based on logic provide for the endless versatility that sets the computer apart from all other machines.

As with mathematics, *laws* exist primarily as sets of definitions: *contracts, torts, felonies, intent to cause bodily harm*, and so on. These concepts all come into being on paper and then are applied to specific cases and interpreted in the courts. A legal definition provides the basis for a legal argument, which is similar to a logical argument. For example, to demonstrate copyright infringement, a plaintiff may need to show that the defendant published a certain quantity of material under his own name, for monetary or other compensation, when this writing was protected by a preexisting copyright. These criteria are similar to the premisses in a logical argument: If the premisses are found to be

true, the conclusion – that the defendant has committed copyright infringement – must also be true.

As we continue our reflection on the relevance of logic, it is pedagogically both significant and expedient to re-emphasize that logic is both a core philosophic specialism and propaedeutic to philosophy. Yet few people in society today spend much time studying either philosophy or logic. This is unfortunate because so much relies on both: philosophy is a fundamental component to all areas of human inquiry while logic is the fundamental basis on which philosophy itself can be done.

In Issue 51 of *Philosophy Now*, Rick Lewis writes an editorial about why logic and philosophy are so vital:

Above all, the aim of studying the structure of arguments is to think more clearly. This is the aim of critical thinking. The idea is to look at the argument for some position, see if you can identify its precise logical form, and then examine that form to see where it might have weaknesses... Just as philosophy in a sense underlies all other branches of human enquiry, so logic is the most fundamental branch of philosophy. Philosophy is based on reasoning, and logic is the study of what makes a sound argument, and also of the kind of mistakes we can make in reasoning. So study logic and you will become a better philosopher and a clearer thinker generally.(2005, Par.6-7)

The most immediate and obvious benefit from the study of logic is that it can allow us to improve the quality of the arguments we use. When we create logically unsound arguments, we are much less likely to convince people that we have a valid point to make, or get them to agree with us. Even if they aren't familiar with logic, many people will realize that there is something wrong with some fallacious arguments without being able to identify the fallacy involved. The motivation for the study of logic in ancient times was clear, it is so that we may learn to distinguish good from bad arguments, and so become more effective in argument and oratory, and perhaps also, to become a better person. This motivation is still alive, although it no longer takes centre stage in the picture of logic; yet logic still form the heart of a course in critical thinking, a compulsory course at many universities, especially those that follow the American model. I do not mean the kind of run of the mill logic we do in GST102 here.

A second and closely related benefit will be an improved ability to evaluate the arguments of others. When we understand how

arguments are supposed to be constructed and also how they *shouldn't* be constructed, we will find all sorts of bad arguments out there. We may even be surprised to find out how many people are swayed by bad arguments.

Although you may not realize it immediately, there are arguments all around us vying for our attention and acceptance. We hear arguments that we should buy car A rather than car B. We hear arguments that we should vote for politician Gembu rather than for politician Okpanku. We hear arguments that we should adopt this social policy rather than that social policy.

In all of these cases, people are making or should be making arguments – and because they are trying to get us to believe their conclusions, we have to be able to evaluate those arguments. If we can demonstrate that an argument is sound and valid, not only do we have reason to accept it, but we can also defend this acceptance whenever someone asks us why we have done it.

But when we can identify bad arguments, it will be easier for us to free ourselves from beliefs which are not well founded. It also allows us to challenge people making claims which we think are suspect, but we would otherwise have difficulty in explaining why. That won't always be easy, because we often have a heavy emotional and psychological investment in some beliefs, regardless of their validity. Still, having such tools at our disposal can only aid us in this process.

Unfortunately, the argument that prevails is usually the one which gets said loudest and last, regardless of its actual validity. When it appeals to people's emotions, it can even have a better chance of looking superior. But we shouldn't allow others to fool us into believing their claims just because they were persistent — we need to be able to challenge and question their assertions.

A further benefit will also hopefully be an ability to communicate more clearly and effectively. Muddled writing tends to come from muddled thinking, and that in turn tends to come from a poor understanding of what a person is trying to convey and why. But when we know how an argument should and should not be presented, it will be easier to un-muddle those ideas and reform them into a stronger pattern.

Logic by its nature involves skeptical inquiry about all topics. We will have good cause to use such skills when it comes to the claims made by politicians, advertisers, religion, because people in these professions commit logical errors and fallacies on a regular basis.

Thinking clearly is important to everyone every day of their lives. At least, it should be – who wants to think un-clearly or incoherently? That should mean, however, that people would want to

spend time learning how to think clearly and practicing so that they can improve. We don't really see that occurring, though. It's thus curious that something which is so fundamental to everything we do should occupy so little of our time and attention.

It is time to draw the curtain, because as we say in my place “*anyi amaghi ekwoo nna ya loro anyi uwa anyi nighbua ya nri*”, but just before doing that I will be failing as a philosopher if I do not remind us that Aristotle invented logic as a method for comprehending the underlying structure of reason, which he saw as the motor that propelled human attempts to understand the universe in the widest possible terms. In this sense, philosophy relies on logic to help provide explanations for what we see.

The question now is what explanations have we for what we see today in Nigeria and Africa? I have, albeit obliquely, indicated that God is not a dice thrower as such it cannot be a happenstance that I am here delivering my inaugural lecture.

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