Abstract
Logic is a branch of philosophy that deals with the operations of right reasoning, with the main aim of distinguishing between correct and incorrect, good and bad reasoning. With the established existence of African philosophy, there has emerged the question or problem of the existence of African logic. Having established the existence of African philosophy, this piece argues that it would be illogical to ask the question: is there an African logic? The idea of an African logic is the implication of domesticating or inculturating philosophy. It is the African logic that gives birth to the philosophy that is distinctively African. If it is established that there is a close tie between philosophy and logic, and in fact, that it is logic that makes philosophy, and secondly, if it is accepted that philosophy is culture bound, accounting for the emergence of English, German, Indian, Chinese philosophies, it then means that logic is culture bound as well. This is the basis for an argument for an African logic. In responding to the emerging questions, the hermeneutic method of inquiry has been employed.

Keywords: Igwebuike, Logic, African, Philosophy, Complementarity, Universality, Particularity.

Introduction
In the area of philosophy, there are various themes that have constituted problems for reflection and analysis by philosophers; however, one of the major concerns in philosophy is the problem of the meaning of philosophy itself. This is evident in the historical evolution of philosophy. For the Ionian School of Philosophy, philosophy would be nothing more than asking and offering rational explanations of the universe. For the sophists, it would be questioning the foundations of traditional religion, morality and the gods from a subjective perspective. In Socrates, philosophy is acquiring knowledge through questions and answers; thus would involve a process of asking questions and questioning answers until answers are unquestionable and questions
unanswerable. For the Cynics and Cyreniacs, philosophy would be a path to self-knowledge and thus self-sufficiency. Patristic and Early Medieval philosophers would understand philosophy as the handmaid of theology: an instrument for clarifying theological concepts. Descartes would understand philosophy as a search for the certainty of knowledge. The variety of perspectives as to what constitutes philosophy can continue even to the contemporary era.

It is, therefore, not surprising that Jasper (1953) avers that “What philosophy is and what its value is, is contentious” (p. 9). In the contention of Geisler and Feinberg (1980), “…the central and most fundamental philosophical question is the nature of philosophy itself” (p. 13). This, contention, according to Asouzu (2011) is at the root of most controversies and disagreements in the department of philosophy. This notwithstanding, philosophy is from the Greek words: φιλο (philo) meaning love and σοφια (sophia) meaning wisdom. Brought together, it means ‘the love of wisdom’. The concept is a neologism attributed to Pythagoras. Thus, he presents philosophy as a high and supreme achievement of man, and philosophers as aspirants to or proponents of wisdom. According to Maziarz (1987), in this relatively strict sense, philosophy implies both the process of questioning and the results of this interrogation as embodied in a personal or public enterprise of value to mankind.

As an academic discipline, philosophy exercises the principles of reason and logic in an attempt to understand reality and answer fundamental questions about knowledge, life, morality and human nature. Thus, Teichmann and Katherine (1999) and Quinton (1995) would agree that philosophy is a rational critical thinking, of a more or less systematic kind about the general nature of the world, the justification of belief and the conduct of life (p. 666). The idea of an African philosophy does not in any way change the concerns of philosophy but only particularizes it to the African context that philosophy might be relevant to the people of Africa- it can be regarded as an African department of the general concerns of the faculty of philosophy; whether Western or African philosophy, logic is an indispensable ingredient that drives the philosophical process to its conclusion.
Can there be an African Philosophy without an African Logic?
The foregone has established that for philosophy to retain the identity of philosophy, it must have the basic element of logic to maintain the philosophical structure. This would mean that that which bears the name ‘philosophy’ should have logic in it. As regards African philosophy, the question of whether there is an African philosophy or not has been overtaken, captured and conquered by African philosophers. Thus, Makinde in 2010 published the work: African Philosophy: The Demise of a Controversy; even long before Makinde, Innocent Onyewuenyi in 1993 had written a book on The African Origin of Greek Philosophy: An Exercise in Afrocentrism, thus, dating African philosophy before Western philosophy and, in fact, making her the springboard of Western philosophy. Students, from B.Sc to Ph.D cadres are defending their Theses and Dissertations respectively in the area of African philosophy. Conferences are organized in different parts of the world on African philosophy, with many emerging academic associations in Africa identifying with African philosophy. In fact, African philosophy has become a burgeoning field of scholarly investigation. Amidst great challenges, African philosophy has, with a swaggering gait, migrated from bedside consultations to wider social consultations that privilege discourses about everyday African life issues. It is studied in many universities in Africa, and has, in fact, moved beyond the shores of Africa, finding its way into the curriculum of many universities in Europe and America, where it is taught by both African and non-African professors.

Having established the existence of African philosophy, it would be illogical to ask the question: is there an African logic? The idea of an African logic is the implication of domesticating or inculturating philosophy. It is the African logic that gives birth to the philosophy that is distinctively African. There is a close tie between philosophy and logic, and in fact, that it is logic that makes philosophy, and secondly, if it is accepted that philosophy is culture bound, accounting for the emergence of English, German, Indian, Chinese philosophies, it then means that logic is culture bound as well. This is the basis for an argument for an African logic. If there is no African logic that is
determined by the African worldview, then African philosophy would be a caricature of contextual philosophy, and in fact would be out for a western-generated approach to attending to human issues. This does not in any way mean that the logic that is African would lose its universal character- it is still the standard universal logic, but with an African touch. However, as we go further on this issue, it might be necessary to first understand the meaning and nature of logic.

The Meaning and Nature of African Logic
Etymologically, logic is from the Greek word ‘logos’, which is translated into English as the ‘word’. In Greek it stands for divine intelligence, and the underlining structure of reality or purpose. This explains why it is used or God in the Gospel of John who is referred to as “the Word”. While this etymological definition does not bring out the function of logic, it gives an insight into the general understanding of logic as the principle of correct reasoning. However, Nyarwath (2010) defines logic as “a branch of philosophy that studies reasoning. It deals with the operations of right reasoning. It studies principles and rules of reasoning with the main aim of distinguishing between correct and incorrect, good and bad reasoning” (p. 1). Thus, Ejikemeuwa (2015), Copi (1982) and Aja (2008) assert that the art of sound, correct and critical reasoning is in the domain of logic. Bello (2000) adds that logic removes ambiguities and obscurities from human discourse. Logic brings out truth from falsity, consistency from inconsistency, orderliness from disorder, valid argument from invalid argument.

Aristotle refers to logic as an organon or foundation of knowledge. It belongs to the arena of logic to judge inferences good or bad. According to Ochieng-Odhiambo (2009) “It attempts to answer such questions as: what is reasoning? What distinguishes good reasoning from bad reasoning, a good argument from a bad one, a valid argument from an invalid one? Are there any methods of principles to detect fallacies in reasoning, and if so, what are they?” Based on these questions, he wrote further that “From these concerns of logic, it can be seen right away that logic is very, perhaps the most, important branch of philosophy. All branches of philosophy employ reasoning and whether the reasoning in these other branches are correct or not will depend upon whether they
are in accord with the laws of logic. Hence a thorough grounding in logic is indeed most necessary” (p. 123).

By African logic, the focus is on the structure of African thought. Every culture and people have their own peculiar way of thinking or reasoning; and it is the African pattern of reasoning that has brought about the African logic. To speak of the diversity of logic, Momoh (1989) relates logic to human language which differs from culture to culture:

In everyday usage of natural language we talk of a person as being logical if he is reasonable, sensible and intelligent; if he can unemotionally and critically evaluate evidence or a situation; if he can avoid contradictions, inconsistency and incoherence, or if he can hold a point of view argue for and from it, summon counter-examples and answer objections. (p. 174).

The adjective ‘African’ attached to the word ‘Logic’ speaks of the context or the locus of logicality. It is the application of reason to the world and culture of the African people. This is applied not just to written literatures but also to life experiences like: a bird crying in the night and a man dying in the morning. The logical connection of this kind is based on the African principle expressed in the Igbo saying: *ifena-akpataife* (something is caused by something); *odighihegbarakamee* (nothing happens without a reason); *nwata no nuzona-agbaegwu, odinwannununaaguruyaegwuno’hia* (a child who is dancing on the road, there is a bird singing for it in the bush), *You cannot see the rabbit in the afternoon in vain*. The Akan would say, “whenever the palm tree tilts it is because of what the earth has told it”. Ejikemeuwa (2016) thinks that this type of conclusion is not reached after a single occurrence; it is based on several cases of witnessing a particular event over a period of time. From this experience, a logical connection is established.

Igwebuikie and the Universality and Particularity of Logic
The idea of Igwebuikie as the logic of African philosophy carries within it a dual but complementary understanding of logic. First it sees logic as
a universal phenomenon. This is very important since logic is a fundamental ingredient of the human person whose thoughts and thinking are organized, analyzed and sustained by some intrinsic structures that make the way for a systematic conception of reality. This being the case, it can be said that logic is thus a necessary element of every culture. There is no culture that does not accommodate a good argument, especially as it concerns their conclusions. Whether in Africa or in Europe or in America or in Asia, if the assumption of an argument is true, the conclusion of the argument would always be true. For instance:

If Njoku is an African philosopher,
Then Njoku is a great African thinker,
Njoku is an African philosopher, therefore, Njoku is a great African thinker

If Kanu is shorter than Emeka,
then Kanu should be taller than Usman
Kanu is taller than Emeka, therefore, Kanu is taller than Usman

These are arguments that are logical and cannot be accepted in one culture and rejected in another culture. Their conclusions are all acceptable as their assumptions are true. Thus, the principles of logic are universal principles that could be generally applied to diverse situations, no matter where. They are, thus, topic-neutral and contingent, in the sense that they do not depend on any accidental features of the world.

By the particularity of logic, it is meant the context in which logic is applied. It speaks of the worldview which differs from one place to another; this bears on the universal application of logic. While logic is universal, it is clear knowledge that the cultural experiences of people is meaningful within the context of an organized language that points to a logical ability- it is a people’s language that communicates their logical world. This establishes the nexus between culture or language and logic, and thus, between Igwebuikike and the question of African logic.
Igwebuike as the Complementarity and Distinctiveness of African Logic

Igwebuike is the modality of being in African philosophy. It is from the Igbo composite word and metaphor Igwebuike, a combination of three words. Therefore, it can be employed as a word or used as a sentence: as a word, it is written as Igwebuike, and as a sentence, it is written as, Igwebuike, with the component words enjoying some independence in terms of space. The three words involved: Igwe is a noun which means number or population, usually a huge number or population. Bu is a verb, which means is. Ike is another verb, which means strength or power. Thus, put together, it means ‘number is strength’ or ‘number is power’, that is, when human beings come together in solidarity and complementarity, they are powerful or can constitute an insurmountable force or strength, and at this level, no task is beyond their collective capability. Igwebuike is, therefore, a philosophy of harmonization, and complementation. It understands the world immanent realities to be related to one another in the most natural, mutual, harmonious and compatible ways possible.

Igwebuike provides an ontological horizon that presents being as that which possesses a relational character of mutual relations. As an ideology, Kanu (2016a&b) opines that Igwebuike rests on the African principles of solidarity and complementarity. It argues that ‘to be’ is to live in solidarity and complementarity, and to live outside the parameters of solidarity and complementarity is to suffer alienation. ‘To be’ is ‘to be with the other’, in a community of beings. It is anchored on the African worldview, which, according to Iroegbu (1995) is characterized by a common origin, common world-view, common language, shared culture, shared race, colour and habits, common historical experience and a common destiny. Mbiti (1970) classically proverbializes the community determining role of the individual when he writes, “I am because we are and since we are, therefore I am” (p. 108).

The African worldview, therefore, is ruled by the spirit of complementarity which seeks the conglomeration, the unification, the summation of fragmented thoughts, opinions and other individualized
and fragmented thoughts and ideas. It believes essentially that the whole is greater than the corresponding parts. It is also a view that maintains that by the coming together of the individual or parts, a viable and sustainable whole will emerge, and by this, the parts will get to the brim purpose of their existence.

The complementary character of reality from the Igbo philosophy of Igwebuike can be compared to Plato’s political/ethical theory, according to which, for there to be justice in the state, the three parts that make up the state, that is, the rulers (the philosophers) the guardians (the soldiers) and the artisans (the labourers) should often work together in one accord with each person doing his or her work efficiently to ensure a peaceful co-existence in the state. According to Plato, if any part refuses to do what he/she is ought to do, there is bound to be a problem in the society. (1987:205). Real potentialities of individuals and society is actualized in complementarity than as individuals. “Complementarism is a philosophy that seeks to consider things in the significance of their singularity and not in the exclusiveness of their otherness in view of the joy that gives completion to all missing links of reality” (Asouzu 2004, 39).

Igwebuike as the Ontological Foundation of an African Logic
Ozumba (2004) observed that every society has its own stock of epistemological thoughts, methods and world views. This assertion is fundamental to epistemology as the quest for knowledge is part of human nature; and thus, it is the prerogative of every culture or tradition. Like every other people, the African has his own method or means of acquiring knowledge. Following from the construct of the African ontology which is complementary, African logic in general is complementary and integral in character, accepting the co-existence of opposing realities as complementary.
African logic is dialectical in character. And by dialectics, it is meant a method of philosophical argument that involves some sort of contradictory process between opposing sides. Its most classic version in ancient Greece is found in Plato. He presented his philosophical argument as a back-and-forth dialogue or debate, generally between the character of Socrates, on one side, and some person or group of people to whom Socrates was talking (his interlocutors), on the other. In the
course of the dialogues, Socrates’ interlocutors propose definitions of philosophical concepts or express views that Socrates challenges or opposes. The back-and-forth debate between opposing sides produces a kind of linear progression or evolution in philosophical views or positions: as the dialogues go along, Socrates’ interlocutors change or refine their views in response to Socrates’ challenges and come to adopt more sophisticated views. The back-and-forth dialectic between Socrates and his interlocutors thus becomes Plato’s way of arguing against the earlier, less sophisticated views or positions and for the more sophisticated ones later.

A more refined dialectics is the Hegelian dialectics of thesis, antithesis and synthesis (Etim 2015). Hegel’s dialectics refers to the particular dialectical method of argument which, like other “dialectical” methods, relies on a contradictory process between opposing sides. Whereas Plato’s “opposing sides” were people (Socrates and his interlocutors), however, what the “opposing sides” are in Hegel’s work depends on the subject matter he discusses. In his work on logic, for instance, the “opposing sides” are different definitions of logical concepts that are opposed to one another. In the Phenomenology of Spirit, which presents Hegel’s epistemology or philosophy of knowledge, the “opposing sides” are different definitions of consciousness and of the object that consciousness is aware of or claims to know. As in Plato’s dialogues, a contradictory process between “opposing sides” in Hegel’s dialectics leads to a linear evolution or development from less sophisticated definitions or views to more sophisticated ones later. The dialectical process thus constitutes Hegel’s method for arguing against the earlier, less sophisticated definitions or views and for the more sophisticated ones later. Hegel regarded this dialectical method or “speculative mode of cognition” as the hallmark of his philosophy.

In African logic, one notices the reliance on the contradictory process of opposing sides. For instance, day is vivified and complemented by night and good by evil. The adage that “Abasiobotmbat, abotudaraikpat.” Meaning “the God who creates mud made available something to wash off the mud”, explains this fact of the complementarity of contradictory realities. The two realities – “mud” and “water” – are mutually opposed but are two sides of the same coin. Anyanwu (1981) describes this
Contradictory dialectics as the “inner curve of reciprocity” (p. 87) that makes African epistemology to avoid the dualism of subjectivism and objectivism. The contradictory dialectics is not negative but affirms the functionality of differences as essential and incomplete dimensions of the whole.

**Conclusion**
Contrary to the perspective of Lucien Lévy-Bruhl, a French philosopher, sociologist, and anthropologist who is famous for his study of primitive mentality and his calling for the scientific study of the categories of thought in different societies, who argued that there are two basic mindsets of humankind—"primitive," or “pre-logical,” and "civilized," and tried to show that the mechanisms of thinking of these two types of mind were different. Lévy-Bruhl considered that “mystical thinking” was the essence of the primitive mind - the African, whereas rational thinking, based on logic and inference, were the hallmarks of the civilized mind. Also, contrary to Horton’s view that Africans, instead of employing intuition and ideas, have a rich proliferation of a sort of thinking called magical.

These notwithstanding, within the African epistemological hemisphere, this piece has argued that Igwebuike is the logic of African philosophy, which defines the African presentation of ideas in such a way that they would be reasonable to the African. It has existed informally in African traditional philosophy, and has emerged in a more sophisticated style in contemporary African philosophy through the writings of professional African philosophers. Its distinctiveness is anchored on the belief that human cognition takes place in definite historical and particular socio-cultural contexts. Thus, African logic helps in the presentation of African ideas in such a way that error is avoided, expression is clear, the reasoning is sound and correct, it informs the prediction of events and sound decision-making, etc.

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References


