

# A Chomskyan Principles and Parameters Approach to African Philosophy

*Maduabuchi Sennen AGBO, PhD*

## Abstract

*The recurrent investigative methods in African philosophy have concentrated on examining colonial and post-colonial experiences with a particularistic approach. This approach tends to limit the inquiries without reference to wider issues of philosophy, which is a global discipline. This paper proposes the adoption of the Chomskyan method of investigation in theoretical linguistics to facilitate a paradigm shift in the investigative methods of African philosophy. The Chomskyan methodology as contained in (Chomsky 1957, 1965, 1981, 1995) includes a linguistic philosophy motivated by the rationalist philosophy of Plato, Aristotle, Descartes, Kant, Baruch, Spinoza, and Leibniz. Chomsky advocates that language study is aimed at the real nature of the human mind and how the mind acquires knowledge. He goes on to propose the theoretical framework of Principles and Parameters (P&P) as a method of investigation of the unconscious knowledge of language and language acquisition. Chomsky's methodology is universalist in approach. This paper, then, proposes that the adoption of this Chomskyan procedure is appropriate for investigations in African philosophy, in order to give it a global position. This would ultimately result in the substantiation of African philosophy and exposition of its relational features with other philosophies. It would also explore the spatio-temporal intuitions and the conditionality that give rise to African philosophy. These would all be factored as idealisations but the achievability of these idealisations can also be determined by the application of the proposed methodology. The ultimate aim then is to catalyse the incorporation of African philosophy into the mainstream of general philosophy.*

*Keywords:* Chomsky, principles and parameters, African philosophy

## Introduction

Inquiry into African philosophy has been motivated by the need to counter the adverse effects of colonialism and critically investigate the existential problems facing Africa. Exponents of African philosophy have investigated issues that have stimulated exhaustive debates about the concept, scope and prospects of African philosophy as a discipline. In this wise, Serequeberhan (1990) proposes that African philosophy is the attempt to reverse the misfortune of colonialism and in the process, come up with practical solutions to the current problems of development in Africa. Iroegbu (1994:116) gives a straightforward definition of African philosophy as “the reflective inquiry into the marvels and problems that confront one in the African world in

view of producing systematic explanations and sustained responses to them." This reflective inquiry embodies questions about the universe, humanity, God and the afterlife. Iroegbu (1994:116), concludes that these questions touch on the 'empirical' and 'meta-empirical' aspects of reality. This scope of African philosophy is explored in Wiredu (1992; 1998), Sogolo (1993), Oladipo (1992), Masolo (1994), and Asiegbu and Agbakoba, (2008). The problems of development in Africa include democracy, globalisation, economy, knowledge and diseases. Masolo (1994) declares that confronting these problems require the rational inquiry into the nature of reality with the ultimate aim of knowing the truth about nature and reality. It is evident that, though, African philosophy is focused on decolonising the African mind and deconstructing Western concepts in the quest for modernity and development in Africa, the discipline is not divorced from the universal idea of philosophy as an inquiry into the ultimate nature of reality, truth and value. Unah (2008:44) further clarifies that authentic philosophy has its root in culture, experience and the human will but the outcome of its investigations is usually timeless and universal. This aspect of philosophising is akin to the linguistic philosophy developed by Chomsky (1957, 1965, and 1986). It emanates from the concept of Universal Grammar and the Principles and Parameters approach to linguistic analysis.

The theories and ideas of Noam Chomsky, the American linguist and political activist, have dominated linguistic studies for the past five decades. His ideas started developing in 1957 with the publication of *Syntactic Structures*. In this book, he developed the ideas for Transformational Generative Grammar (TGG), which embodies a linguistic philosophy, proposing the unconscious knowledge of language. In TGG, linguistic inquiry aims at the real nature of the human mind and attempts to explain how the knowledge of language is acquired by the child.

TGG comprises base and transformed structures. The base structure of language is an established state of the mind/brain. These base structures are innate and have the computational capacity to create an infinite number of sentences. Chomsky calls this the Language Acquisition Device, (LAD). This device is a distinct and organised structure in the mind. The LAD compares to other biological structures of the mind responsible for visual, auditory and olfactory perception.

His ideas were inspired by the rationalist philosophy of Plato, Aristotle, Descartes, Kant, Spinoza, and Leibniz. In explaining the base structures involved in the acquisition of language, he appropriates the Cartesian categories of innatism and mentalism. The organisation of the LAD gives rise to Universal Grammar, (UG) which is the blueprint for all possible human

languages. Therefore, the linguist is interested in the organisation of UG in order to understand the principles and rules of language acquisition. For Chomsky, this study is important because it focuses on the domain where human beings excel. In studying the LAD, Chomsky adopts Logic and Mathematics. Symbolic Logic is employed to predict and generate an infinite number of sentences. This approach proved that the methods of analytical philosophy are applicable to the study of language acquisition and the investigation of the human mind, where reason is hosted. Therefore, human reason is a separate biological system and the explanation of the human mind is circumscribed by the biological limits of the mind. These explorations revealed that the unconscious knowledge of language can be rationalised.

In developing his linguistic philosophy, Chomsky rejects aspects of Kantian epistemology which combine empiricism and rationalism. He opposes the idea of empiricism in language acquisition. For Chomsky, there is no direct association between the enormity of the language data available to the child and the short time it requires for the child to acquire the grammar of his language. This supports his claims that the knowledge of language must be innate and can be rationalised. This proposition is intellectualist in orientation. Chomsky's intellectualism had impact on mind-body dualism. Following the philosophy of Rene Descartes, Chomsky established the idea that the knowledge of language is not a physiological process but a thing of the mind, which is unconscious. In other words, this philosophy postulates that human linguistic structures are universal and essential features of the human mind. The object of language study then should be these universal and essential features of the mind. The linguistic competence of the speaker of language is embedded in the LAD. Competence is not equal to the skill the speaker has in handling the language, rather, it has to do with the speaker's innate knowledge of the grammar of the language. Competence is differentiated from performance. Performance comprises the behavioural aspects of language acquisition, involving other cognitive and neurological systems.

Chomsky's linguistic philosophy has been opposed by anthropologists, sociologists and political economists. Empiricist philosophers also reject his views. They condemn his approach as idealistic and utopian. Instead, they propose that language acquisition and, indeed, the acquisition of knowledge starts from an empty mind, with no prior biological limitations. Therefore, knowledge and even language acquisition is by induction and not deduction. Anthropologists and sociologists affirm that language is a cultural artefact and its acquisition is influenced by social factors which ultimately give rise to varieties of language analogous to varieties of culture. Chomsky replies his

critics by specifying that their ideas cannot account for the kind of knowledge or language that is possible for the human mind to grasp. Following their ideas, there would be no stable structure to determine any possible human knowledge or language. Besides, his critics' ideas focus on what differentiates people and not what people have in common. For Chomsky, the focus of the intellectual should be on what unites people and not what differentiates them. Chomsky's philosophy is further developed in his 1981 book, *Lectures on Government and Binding*, where he develops a Principles and Parameters approach to linguistic analysis. The rest of the paper is divided into two sections. The next section discusses in some details the theory of P&P, while the other section explores the adoption of the principles of P&P to investigations in African philosophy and the subsequent impact. The last section is the conclusion.

### **The Theory of Principles and Parameters**

The development of the Principles and Parameters (P&P) theory was motivated by the need to find answers to old problems in the study of language. These problems as stated in Chomsky (1995:17) include the problems of the knowledge of language, language acquisition, language use and the evolution of the language faculty in the mind/brain. The problems also include the realisation of the mechanisms of the LAD in the brain. The answers to these problems were guided by further inquiries that led to insights about the features of UG. A striking feature of UG is that it has the capacity to produce infinite number of the sentences of a language through a production process that is finite. A language then comprises an endless number of sentences emanating from this fixed productive process of UG. As already stated, the competence of the language speaker consists of his knowledge and understanding of the language, which lies in UG, while the performance consists of what he can do with this knowledge and understanding. In the P&P approach, the terms I-language and E-language are adopted to further explain the concepts of competence and performance. The I-language is the 'intentional' language that refers to the inner state of the mind. The E-language is the 'extensional' language referring to the external structure of the I-language. The object of linguistic analysis is the I-language.

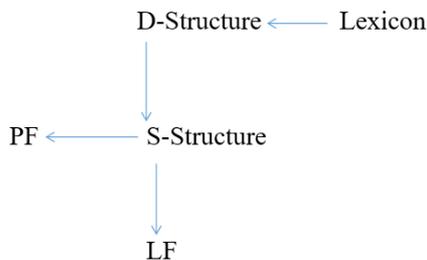
The terms *descriptive* and *explanatory* adequacy are engaged for describing the theory of UG. A grammar has *descriptive* adequacy if it is able to give an account of the initial state of the language faculty. While a grammar is said to have *explanatory* adequacy if it is able to account for how language is acquired.

The I-language has two components, the Computational System and

the Lexicon. The computational system produces the Structural Descriptions (SD), which are the possible syntactic structures of the language. The Lexicon contains the vocabulary making up the syntactic structures. The SD gives rise to a level of representation technically termed the D-Structure. Here the lexicon of the language is inserted. In generating the SD, the computational system takes account of the sound and meaning of each linguistic structure. Chomsky (1995) expresses these aspects of the computational system as *levels of representation*. There are two levels which are termed the *Phonetic Form* (PF) and *Logical Form* (LF). The PF is the level of representation of the sound while the LF is the level of representation of the meaning of the syntactic structure.

There are conditions of descriptive and explanatory adequacy that the PF and the LF must satisfy in order to adequately give account of the LAD. For the PF, the first condition is that of universality, where the linguistic expression must be a sound that is representable in all human languages. Secondly, production of the sound should be interpreted within the sensorimotor system and, thirdly, this interpretation should be uniform for all languages in order to be able to explain the features of language. The LF also needs to meet the same conditions. In the first place, any human thought should be able to be expressed with this representation. Secondly, this representation can be recognized by other cognitive faculties. Thirdly, the meaning must be uniform for all languages in order to be able to explain the features of language.

Therefore, the SD contains three representative levels that are interfaces. These are the D-Structure, the PF and the LF. There is an intermediary between these levels, the S-Structure. The relationship between these three levels is unidirectional with representations from the D-Structure projected onto S-Structure and then independently projected onto PF and LF. This diagramme below graphically represents these thoughts.



Chomsky (1995:22)

The ultimate aim of P&P is to present UG as comprising two categories of facts. The first includes the principles of language which remain invariant for all languages and the second includes the parameters which are language-particular. The principles of language are expressed at the level of D-Structure and LF, while the parameters are usually PF representations. These principles are sub-divided into groups known as modules of language which include the binding theory, theta theory, case theory amongst others. These modules have PF representations in some cases. The next section of the paper will deal with how to apply the theory of principles and parameters to African philosophy.

### **African Philosophy in Principles and Parameters**

From the foregoing discussion, it is observable that the P & P approach to linguistic analysis has a universalist orientation. They are universal programmes for determining the knowledge of language and the acquisition of language. Inquiry into African philosophy can apply the methods and assumptions of this theory to project African Philosophy into the mainstream. This is to echo the instructive note of Wiredu (1998) that decolonisation in African Philosophy does not entail closed-mindedness. That philosophy universally necessitates the application of logic, mathematics and the methods of inquiry in the natural sciences. Wiredu further elaborates:

To attend to logic a little further: this discipline is a certain kind of study in syntax and semantics. Although it is fashionable to call the systems that are constructed and studied therein artificial languages, it cannot be supposed that these 'languages' are totally independent of the natural languages in which the constructions are initiated. It is not inconceivable, therefore, that some aspects of the results obtained, especially in the philosophical reaches of the researches, may depend on characteristics of the syntax and semantics of the particular natural languages involved that are neither universal nor necessary to all natural languages. Africans working in these areas will have to be especially alert to this possibility lest they multiply concepts and concerns beyond necessity (Wiredu, 1998:22).

He goes on to emphasize that African philosophy needs to move on from its assumed role of decolonization to the critical examination of such universal issues as justice, truth, freedom, time, causality, beauty and goodness. In analyzing these issues, Wiredu offers a method where particularistic studies in African philosophy should be done with a universal outlook.

It is noteworthy that Chomsky's study of linguistics has tremendous impact on his political philosophy and activism. In this wise, he submits that

political activities should be motivated by an abstract level of rationalization. In doing so, socio-political issues should be comprehensively examined to create the ideological justification for social and political engagements. Otherwise, the resulting socio-political activities will be indicative of selfish motives. The application of Cartesian common sense and an open mind are the requirements for this kind of rationalization of social reality. This Cartesian common sense can be adopted from the methods of P&P. Cartesian commonsense in itself is adopted from Aristotle's *Categories*. In *Categories*, Aristotle established 10 categories of human experience. The idea is to identify all the basic categories of reality and these include substance, quantity, quality, relation, place, time, posture, action and affection. Linguistic inquiry over the decades has been focused on identifying each of these categories in any language of interest. This has given rise to linguistic tags for these categories in many well studied languages. These tags have motivated linguistic theories including the P & P and not surprisingly, Chomsky's linguistic philosophy.

Following Chomsky's linguistic philosophy, this paper proposes the adoption of certain factors in doing African philosophy. These include the factors of substantiation, relation to universal social realities, spatial and temporal intuitions, conditionality and achievability. Each of these considerations must in principle, be in affinity with universal principles of philosophical investigation.

### **Substantiation**

This paper proposes the demonstration of substantiation in inquiries into African philosophy. Substantiation in this case requires that while examining past and current African experiences, the philosopher should go beyond the mere recanting of particular problems to identifying the essence of the problem in relation to humanity. This essence should be examined in uniformity with the common humanity the African shares with others and how the African apprehends this problem in the light of our common human nature. For example, the current problems of poverty and bad governance would be better examined by not only bemoaning the failings of colonial and post-colonial African politics but by questioning the knowledge, affections and inspirations in the mind of the African concerning governance and prosperity. The knowledge and affections include the impassiveness or otherwise as reflected in the mind. The inspiration could also be determined by examining the contemplative spirit of the African mind. The philosophical examination of the use of language is a veritable instrument in these inquiries.

### **Relation to Universal Social Realities**

This substantiation of African philosophy would ultimately be comparative to other social realities and philosophies. The resulting relational concepts should be determined. The determination is one method of universalizing African philosophy. For example, in examining the issue of justice or truth or any other philosophical issue, there should be no particularistic approach to these concepts. The African concept of justice or truth or whatever, should be relational to other philosophies and in essence be allied to them in a deterministic way. The focus then will be the parameters for determining these concepts in the African's mind.

### **Spatial and Temporal Intuitions**

In intuiting African philosophy, there should be the understanding of place and time for all concepts. Place and time are universal constraints for determining concepts. For example, in inquiring about freedom or causality or temporality for that matter, place and time are necessary. The place and the time give structure to the attitudinal characteristics of the African to these issues. This kind of philosophizing would have a multidimensional perspective and can be comparable to other philosophies determined within spatio-temporal parameters.

### **Conditionality**

Philosophical issues should be tackled within circumstances of the African's knowledge and self-awareness in relation to other peoples and their self-awareness. Therefore, in examining issues, the factors of how circumstanced people are in their development vis-à-vis other peoples' development should be taken into consideration. In other words, philosophical issues, which are always universal, should be examined within the indigenous knowledge base of the African but with a view to universalizing it by relating it to the indigenous knowledge base of other peoples and their philosophies.

### **Achievability**

In examining issues, African philosophy should be focused on the pragmatic effects of these inquiries. This can be termed the achievability of the reflections of the mind of the philosopher. Achievability can be measured in relation to what has been socially and pragmatically achieved from the musings of other philosophers in other climes. In determining the achievability of the idealisations of the philosopher, the issue of capacity and value takes precedence. Therefore, making practical the idealisation of the African situation should be considered with the intention of the practical impact of these idealisations and the added value to the African condition. Achievability

is universal in the sense that one can measure how other philosophers and peoples of other climes achieved, in practical terms, the ideals of their society. In achieving these, the values can be practically determined and measured. African philosophy can be related to these issues in a universal way.

### Conclusion

The proposal is a contribution to the perennial issues in African philosophy. There is the need for a paradigm shift from the particularistic approach to a universalist perspective. The principles and parameters theory of linguistic analysis provides a template for this paradigm shift. The argument here is that since the knowledge of language and its acquisition is the symbol of excellence in human cognition, adapting the principles of that knowledge for philosophical analysis is appropriate. African philosophy is still developing and may yet be incorporated into mainstream philosophy. It is the position of this paper that adopting the methodology of the P & P approach would catalyze the incorporation of African philosophy in the body of universal philosophy.

## REFERENCES

- Asiegbu, M. & Agbakoba, J. (eds). (2008). *Four Decades of African Philosophy: Issues and Perspectives*. Ibadan: Hope Publications.
- Chomsky, N. (1957). *Syntactic Structures*. The Hague: Mouton & Company.
- Chomsky, N. (1965). *Aspects of the Theory of Syntax*. Cambridge, Massachusetts: MIT Press.
- Chomsky, N. (1981). *Lectures on Government and Binding*. Dordrecht: Foris.
- Chomsky, N. (1986). *Knowledge of Language*. New York: Praeger.
- Chomsky, N. (1995). *The Minimalist Program*. Cambridge, Massachusetts: The MIT Press.
- Iroegbu, P. (1994). *Enwisdomisation & African Philosophy (Two Selected Essays)*. Owerri: International Universities Press Limited.
- Masolo, D. (1994). *African Philosophy in Search of Identity*. Edinburg: Bloomington.
- Oladipo, O. (1992). *The Idea of African Philosophy*. Ibadan: Modecular Publishers.
- Serequeberhun, T. (1990). "African Philosophy: The Point of the Question" in Serequeberhun, T. (ed). *African Philosophy: The Essential Readings*. New York: Paragon House. Pp. 1-23.
- Sogolo, G. (1993). *Foundations of African Philosophy: A Definitive Analysis of Conceptual Issues in African Thought*. Ibadan: Ibadan University Press.
- Unah, J. (2008). "Doing Philosophy and Doing African Philosophy" in Asiegbu and Agbakoba (eds). *Four Decades of African Philosophy: Issues and Perspectives*. Ibadan: Hope Publications. Pp. 37-47.

- Wiredu, K. (1992). "African Philosophical Tradition" in *The Philosophical Forum*, Volume XXIV, Nos. 1-3, Fall. Pp. 41-58.
- Wiredu, K. (1998). "Toward Decolonising African Philosophy and Religion" in *African Studies Quarterly*, Volume 1, Issue 4. Pp. 17-46.