

THE MEASUREMENT OF TIME IN AFRICA

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ABSTRACT

In this paper, I attempted to revisit the concept of time in Africa both during the pre-colonial and post-colonial times. Some scholars have alleged that Africans have no idea of time while some who refuted the former opined that if Africans ever have the faintest idea of time then their mode of measuring it is unscientific and unstandardized. I observed in this paper that indeed there is a peculiar mode of measuring time in Africa which is marked by events, landmarks, activities etc. which are contrary to the conventional western mechanisms and expressions. I contend that the idea of “absolutizing” western time over other traditions is denying them their uniqueness and their peculiarities that accurately define them. I propose the need for rigorous conversations among heterogeneous African traditions to single out a unique time for Africa that will capture all African peculiarities.

INTRODUCTION

Time has a powerful and supreme influence in history and in the affairs of men. The activities of men and their destinies are decided and concluded in and on time. Time also occupies a strategic position in the lives of men through its comforting and therapeutic powers. Asukwo identifies the necessity of time in our day to day activities thus:

All the resources committed to the mission of success, the mysterious hand of time is the shoulder to soothe the disheartened in moments of sorrow, the mysterious hand of time alone can lay on the heart to comfort the sorrowful of all medical aids and drugs administered to victims of injury, time is the master healer that treats the scar of every injury. When the oppressed cry out of justice, it is the judge of time that ultimately brings every offender to book. And when our consciousness has borne testimony of all these facts we cannot help but agree that the phenomenon of time is indeed supreme. (2016: 17)

In African ontology, the concept of time equally has its overbearing influences and it permeates into all African worldviews ranging from their culture, spiritual and economic life. Mbiti notices this relevance when he writes that “time is the key to understanding the African ontology, their belief, **practices, attitude and general way of life**”(1976: 36).

It is regrettable however to observe that this important gateway of understanding African ontology is gradually fading away because of the raging western incursions in African tradition. The nineteenth century western colonial domination was foisted on hapless Africans through series of cultural and intellectual dominations. These invasions were so traumatic and psychological that Africans mindlessly surrendered their cherished values. The concept of time and its mode of measurement count as one of the values that were highly treasured in African setting but unfortunately they were eroded by ever increasing western cultures firmly staged within African traditions.

The arrival of western clock in the early 19th century made it difficult for Africans to conform properly to its form and usage because of its inability to accommodate African environment. To legitimize the western structured time, they classified African mode of time measurement as subaltern, substandard, quark etc but glorified the western clock as the only classical and standard time. This “absolutisation” of western time is the burden that this work tends to correct by maintaining that other cultures have their relative time usage which is peculiar to them and the idea of universalizing the western time to other cultures is denying that tradition their due heritage. There is a unique way of measuring time in Africa which many don't neatly apprehend. This is to lay credence to Geertz's truth of the doctrine of cultural relativism which provides that we can never apprehend another people's imagination neatly, as though it were our own. (1977: 779).

It is on the strength of the above that this paper sets out to examine time in Africa and its mode of measurement before the arrival of mechanical time. To achieve this, section one will consider how time is conceived in Africa. Section two examines how time has been periodized in African philosophy and it also explored those who championed it in those epochs. The following section delves into how time is measured in traditional Igbo society to unravel how Africans chronicle time to also know how peculiar and standardized these modes are. To achieve this, this paper will first of all, do a historical survey of time in Africa. Also this work will consider time in contemporary time vis a vis time in pre-colonial times.

CONCEPTION OF TIME IN AFRICA

The ontology of time needs an accurate verbal tool and technical skills in order to communicate its meaning and to express the understanding not only to an African but to all humans. John C. Smart captures this complexity thus;

Learning to handle the word 'time' involves a multiplicity of verbal skills, including the ability to handle such connected words as earlier, later, now, second, and hour. These verbal skills have to be picked up in very complex ways (partly by ostentation), and it is not surprising that the meaning of the word time cannot be distilled into a neat verbal definition (qtd in Asukwo, 2016)

The task of handling the multiplicity of the concept of time has been undertaken by Africans and non-Africans alike in attempt to concretize the claim of the existence of

time in Africa. Like Smart (2016) above, the actual explanation of time in Africa is yet to be fully explored but for the sake of this section, I will explore the concept of time according to Mbiti.

In the seminal sections [g] and [h] of chapter 3 in his classic book, Mbiti's emphasizes strongly on the subjectivity of time because for him time is not considered real until it has been experienced. The ontological core of time as reported by Mbiti is that "to constitute time is to be lived through." As such "time is essentially experienced time only" that means "to exist is to exist in time alone"(1970:29). Time in African ambience is simply a composition of events whereby a day, month, year is simply the sum of its events.

The background of Mbiti's concept of time is based on research conducted around Kikamba and Gikuyu languages whereby three verbs that speak of the future were analyzed and the scope covers only a period of six months but could not go beyond two years. It implies that events that fall outside the range of this time frame lie outside the interest of the African.

The day in the traditional African set-up is reckoned according to its significant events. In Ankore town of Uganda, herds of cattle are symbols used to denote wealth, a day in that clime is reckoned to events pertaining to cattle.

Two memorable periods recognizable in African tradition in relation to time are *sasa* and *zamani*. *Sasa* is the micro-time which is the period of conscious existence and the period of individual memory. The ontological rhythm of individual life: birth, maturity, death is played out in *Sasa* at the brink of potential time. But as soon as events occur they move 'backwards' towards *Zamani*. In Mbiti's estimation, after death, one begins the journey backward towards *Zamani*. It is at this stage that he becomes the living-dead and is subsumed in the state of "personal immortality". On the other hand, when one is no longer remembered on earth by his name, he is said to sink into *Zamani* where he achieves the state of "collective immortality". *Sasa* as the micro-time feeds the *zamani* which is macro-time. Finally, Mbiti observes that *Zamani* is the "centre of gravity" of all life and thought; it is "the graveyard of time, termination period, the dimension in which everything finds its stopping point (1970:29).

Scholars like Gyekye (1975), Gbadegesin (1991), Masolo (1994), Iroegbu (1994), Oke (2005), Izu (2011), Onwubiko (1988), and Kalu (2014) were critical of Mbiti's conception of time and label his work as one of the oppressive Eurocentric projects aimed at justifying the irrationality tag that was yoked on Africans. Critiques see Mbiti's project as one ridden with fallacies and dismissed his efforts as mere armchair research because he foisted what he observed from a portion of Africa on the generality of Africa. Most of these scholars however employed some definitive verb tenses to counter Mbiti's (1976) submission that Africans lack idea of future time. These scholars employed peculiar sayings, proverbs, songs, peculiar activities like agricultural activities and spiritual activities like divination to denote future time in African cosmology.

Mbiti however cannot be trivialized for this ambitious project in African philosophy. He must be commended for laying a great foundation for a robust discourse on time in African cosmology which for me has provided a platform for others to stand on. I acknowledge Him as one of the progenitors of African philosophy who kick started the

journey which we are gleaming on today. With this background set, we will look at the discourse of time in African philosophy.

TIME IN AFRICAN PHILOSOPHY

African philosophy has existed for many decades now and it has recorded unprecedented growth and fierce criticism as well. Its birth was out of frustration which was occasioned by racialism, history of slavery and colonialism. This frustration was also fueled by the fact that... “the identity of the African was hugely an European creation, their thought system and their perception of reality was structured by the colonial shadows (Chimakonam : 2017b).

Arising from the foregoing, Chimakonam (2015b) demarcates the history of African philosophy into two trends: pre-systematic and systematic. He further divided the systematic trends into four periods.

1 Early period: 1920s–1960s

2 Middle period: 1960s–1980s

3 Later period: 1980s–1990s

4 New (contemporary) era: post-1990s.

The early period was characterized by the struggle for independence by the nationalists. This period featured the development of ethno-philosophy by the early African philosophers who were conversationally known as the African philosophy first eleven¹. These first African trained philosophers returned from overseas with the burden for African liberation and pressed massively for self-rule, the propagation and reconstruction of African neglected image.

The middle period of African philosophy witnessed what we know today as the great debate. Members of this group are mainly philosophers that are trained in western universities who came back to establish systematic philosophy in African universities. This period is characterized by two epochs: the particularists/ traditionalists and Universalists/ modernists. The particularists/ traditionalists support the views of ethno-philosophers while the modernists/ Universalists completely deny vehemently the tenets of the ethno-philosophers. They also put to death the controversies occasioned by the great debate which borders on questions regarding the existence, nature and the main corpus of African philosophy.

The later period were preoccupied with the task of constructing a formidable episteme for African philosophy. Critical Reconstructionists and Eclectics are the two opposing groups in this period. While the former emerged from the Universalists, the later evolved from the traditionalists. Egbai and Chimakonam have it that:

The former sought to build an African episteme untainted by ethno-philosophy; whereas the latter sought to do the same by a delicate fusion of relevant ideas from the two camps. In the end, Critical Reconstructionism ran into a brick wall

when it became clear that whatever it produced could not truly be called African philosophy if it was all Western without African marks. (2019:180)

Their tasks can be summarized thus: inventing their own traditional philosophers, creating their philosophic ideas by interpreting African's cultural endowments and showcasing their own traditional philosophy through literary styles.

The new (Contemporary) period is grouped under the eclectic school, which combines the tenets of the traditionalist and the Universalist school. They want to capitalize on the failure of critical reconstructionists to build a formidable system for African philosophy. The quest for system building is what drives the conversational school of philosophy who seeks to promote a scholarly platform for rigorous and complementary engagements between likely or opposing variables (Egbai and Chimakonam 2019; 181). The works of these eminent scholars pioneered the emergence of conversational school of philosophy; C.S Momoh with his theory of “many many truths” (1991), Pantaleon Iroegbu with his “Uwa Ontology” (1995), and Asouzu with his “Ibuanyidanda”, a metaphysical doctrine that projects being as a missing link in a network of realities (2004).

Having x-rayed the brief history of African philosophy, it is pertinent to trace and merge the concept of time in this historical survey. In the Early period (1920s–1960s) philosophers like J. S Mbiti (1967), Ayaode (1977), Oluwole (1997) and Alexis Kagame (1976) are philosophers that featured in this period. One important thing that characterizes this period is their quest to determine what the actual composition of time is. The all agreed that time is composed of events in African cosmology.

The middle period is simply known as the era of great debate. This debate was not limited to the existence, nature and content of African philosophy. Philosophers here equally debated the concepts proposed by the early period philosophers. They assumed the propositions of these early philosophers as mere ethno-philosophy or community thought (which lacked individual input and rigor). Coming to the dimension of time, these philosophers were mainly critical of Mbiti's assumptions on the brevity of future time in Africa. They however posited that Africa has concrete dimension of future time in their worldview. Gyekye (1995), Masolo (1994), Oke (2005), Kalumba (2005) are some of the philosophers that featured in this period.

The later period is characterized by philosophers who are burdened by the need to create philosophic ideas by interpreting African's cultural endowments and showcasing African traditional philosophy through literary styles. Philosophers who contributed to the subject of time in this epoch are Oppong (2013), Izu (2010), Onwubiko (1988), Kebede (2013).

The new (Contemporary) period are obsessed with the zeal to build a formidable system for African philosophy. Iroegbu (1994), Asouzu (2014), Dukor (2010), Kanu (2014), Fayemi (2016) and Nnajiolor (2016, 2021) are some contemporary philosophers in this

epoch that seek to build a systematic philosophy in African philosophy. These philosophers attempt to apply these concepts into African phenomenological and existential situations. Their analysis is not based on mere description of African worldview but with criticality and rigor they prescribe what Africans ought to do.

The next section of this paper seeks to look into the manner of measuring time in Sub-Saharan African. To do this I hope to use the Igbo culture as a case study to demonstrate how Africans measure time both in pre-colonial and contemporary times. The aim of this section is to counter the claim that Africa lacks standard measuring tool with accuracy and precision. I argued that the peculiarity of our environment requires the necessary tool to prosecute it.

MEASUREMENT OF TIME IN IGBO CULTURE

In Igbo traditional setting, time is not measured in a numerical and calendric manner of the western calibrated form. They simply measure time with experienced or empirical events like sunset i.e when chicken return to roost, at cockcrow, during new yam festival last year, at the beginning of raining season etc. Igbo also measure time with motions like the moon phase, the season, night and day, shadows across sundial, ocean tide among others. It is not also uncommon for children to use evaporation of drops of water or spit to gauge or measure time. The motion associated with these events is regular and orderly and therefore constitutes index of time associated with science. Likewise, space is measured with foot lengths, strides, landmarks and time of journey. These systems in their own rights are highly standards to meet the demands of African environment. Africans utilized these means to measure time and in the same vein achieve the end of its usage which is; punctuality to events, early rising from sleep, meeting other demands of the society. They achieved these ends without undue pressure to their health, finances and marital harmonies.

Igbo has peculiar version of Calendar which is contrasted to the western mode of time calibration. This calendar is known as iguaro which is based on lunar cycles and natural movement. The day is measured by the rotation of the earth on its axis; the month represents the time or period the moon moves round the earth; while the year follows the revolution of the earth around the sun. All time reckoning is based on these natural phenomena since their movements are constant (Ossai, 2016).

By Osuji's calculations, there are thirteen months in Igbo calendar, and these calendars consists of a week (*IZU*) made up of four (4) days (*Ubochi*); a month (*Onwa*) of 28 days or seven native weeks (*IZU asaa*); a year or *afo* made up of 91 weeks (*IZUS*) or 13 months (*Onwa*). Incidentally, *Onwa* means moon in the Igbo language and its corresponding month is referred to as a lunar month. Below are the Igbo week (*Izu*), month (*Onwa*) and year (*Afo*, or *Eye*):

The Priests of each community are the time keepers, and the process of time keeping is called *iguafu*. The lunar months dictate major feasts and celebrations in Igboland as it is in most other African ethnic groups.

No	Months (Onwa)	Gregorian equivalent
1	Onwa Mbu	(February-March)
2	Onwa Abuo	(March-April)
3	Onwa Ife Eke	(April-May)
4	Onwa Ano	(May-June)
5	Onwa Agwu	(June-July)
6	Onwa Ifejioku	(July-August)
7	Onwa Alom Chi	(August to early September)
8	Onwa Ilo Mmuo	(Late September)
9	Onwa Ana	(October)
10	Onwa Okike	(Early November)
11	Onwa Ajana	(Late November to December)
12	Onwa Uzo Alusi	(January to early February)

Aside the calculation of time according to months, Igbo's also measure and calculate time according to the four market day matrix. This view is shared by scholars like Ufearo who also shared that the Igbo year is made up of thirteen months,

The Igbo four market days are vital tool as far as the knowledge and calibration of time in Igbo land is concerned. The four-market days share as the matrix upon which the Igbo calendar is built. Unlike the Roman calendar, the Igbo calendar has four days in a week, seven weeks in a month and thirteen months in a year. However, the overall synchronization of the calendar in Igbo is still an object of debate (2014).

The observation of Ufearo is a valid submission because there has been serious debate on the number of months in a year among scholars especially those who seeks to synchronize these months to be in tandem with other worldviews. Scholar like Ekwunife opines that the year in Igbo traditional setting is made up of ten months. According to Ekwunife, "the year is divided into ten major lunar months; each month being dedicated to one or more Igbo spiritual beings" (2014:159).

These months are backed or marked with ritual feast to spiritual beings. They also measure ten months in a year and discount the first two months (January and February) which are called *onwa ntufu* (lost months). It is important to note that in these "lost months" there are no important feasts that are observed therein, this informs the name, lost months.

In contradistinction to the above submissions, Achebe observes that in traditional African Igbo society, there are twelfth months in one year. Achebe demonstrated this claim thus “after the feast, the *Ulu* priest, *Ezeulu* would be eating one yam till the twelfth yam which ends the year. After the twelfth yam come a new yam feast that begins another new year” (1988:3).

In Achebe's calculation, the twelfth sacred yam ends the year and welcomes the New Year which is marked with new yam feast in Umuaro community.

The debate on how to harmonize these discordant accounts are ongoing and will be resolved not long but it seems to me that the account given by Osuji above occupies the most acceptable place among scholars.

TIME IN AND BEYOND PRE-COLONIAL ERA

The advent of Christian linear mode of time consideration has created a lot of reconsiderations among African populace because of their bid to remain relevant in the comity of nations. This contact with European explorers negatively affected the perception of time among Africans. With this contact, the Europeans sadly denigrated African lifestyles and hence regarded the African mode of perceiving time as backward, anti-progressive and a clog in the wheel of development. Also the effect of globalization has not fared well among Africans in preserving this mode of time measurement. The fast and sweeping transition from indigenous worldview to a modern outlook led Fayemi to quip about the Yoruba culture that

Traditional way of reckoning time in Yorùbá cultural community is fading, especially among the new generations and in the urban nerves. The older generations of the Yoruba and the uneducated among them who are residing in the rural areas still hold the traditional notion of time reckoning. (Fayemi 2013).

The elders in remote villages still make use of folklores, oral literatures, and peculiar greetings to preserve this traditional mode of time expressions but many modern and urban dwellers had long jettisoned these traditional lifestyles. Cock crow had long been abandoned for alarm clock and alarm watches. They claim that these devices are preferred because of their mechanical accuracy, coordination and precision. Church bells were also introduced by missionaries to remind their faithful on the accurate programmed time of worship.

In the contemporary world where technological innovations have dominated our daily activities, it is almost abysmal to cling to these celestial-cosmic and terrestrial-ecological cycles to calibrate and measure time in our modern era. These sweeping changes have resulted that the birth/death of an individual is no longer determined with the reign of a monarch or a remarkable event in a community rather materials like birth and death certificates have taken over these methods. Also, biological cycles like birth, crawling,

toddling, running and maturity stages are now chronicled with editable or electronic devices like diaries, official certificates, face books, instagrams, pictures and printable soft-wares.

The celestial-cosmic mediums were used in measuring the day, weeks and even months while the terrestrial-ecological mediums were used in deducing smaller units of time such as minutes and hours of the day. But in contemporary era, clocks, wristwatches have replaced mid-morning guessing of the sun and shape of shadows in the afternoon. The same wall clock and wrist watches have displaced conventional size and position of the moon in the evening and mid-night.

Also, the terrestrial-ecological medium like the twinkling of an eye of a crab was used for measuring the smallest unit of time (seconds) while, the twinkling of the human eye was used in measuring a minutes during the pre-colonial times. Fayemi observes that the activities of birds were used to designate the hours of the day for example, the crowing of the cock designated the dawn of a new day while the early sound of the dove ushers in the morning (2013: 5).

These activities have long been overtaken with the arrival of alarm clocks and wrist watches on the mere reason that these media are not standardized and cannot yield the required twenty first century demands. The truth is that these time media are still relevant to our world today where they are still obtainable especially in our villages and some urban cities. It is worthwhile to note that the place of the sun or moon is still being utilized in determining time even in contemporary times. The sun is universally used to designate the day while the moon is still used to determine the night.

Another aspect that is yet to be over taken by modern devices in the measurement of time in Africa is the lunar-phenomenological mechanisms. The rainy season is a season of planting and growth while the dry season is a season of harvesting and storage. It is interesting to note that Africans are still comfortable with the lunar-phenomenological mechanisms and so they are yet to make a major technological breakthrough that will warrant its abandonment.

The benefactors of these devices utilize them to their fullest without regard for the competing time options. These media are highly standardized and efficient in these places where they are used. So the accusation that they are not standardized is purely a fallacy because the standard of a thing is determined in places where they are used. This is because it is these users that understand the peculiarities of their place and how efficient it can serve them with precision and accuracy. They also understand how well a thing should serve them and channel them towards that direction. Any attempt to impose another standard from outsider is simply an imposition which is geared toward robbing the people their right of ownership and denying them their God given values.

It has been long established that the bane of Africa's growth and development is as a result of her total dependence on western values without an iota of considerations on the peculiarities of her environment. The peculiarities of African weather conditions are not in tandem with the western countries and as such, most of these devices are configured with western prescriptions without any thought for Africa in mind. What then is the hope for Africa in the face of this challenge?

A NEED FOR CONVERSATIONS

Westerners have deified the so called mechanical time as the only standard time to be used all over the world. Their disregard for the time mechanism from other traditions have made the western time as the only absolute time worth using thereby regarding those of other climes as sub-standard and non - classical. It is on this regard and the relegation of African time as a mere footnote of western time that this paper attempts a conversation among African cultures to ascertain the veracity of this claim. This conversation reveals that there are diverse perspectives of time among African cultures due to the heterogeneous nature of African traditions. When we talk of standard, it is noteworthy that African continent is unique and using a western inspired time system to regulate African system is simply cloning Africans into western lifestyle at the expense of African cherished way of life. The consequences of these exercises has resulted in Africans being manipulated to live exactly the way that the westerns live, act, think, dress and work.

Africa should look inward and appreciate their peculiarities in time and also realize the relativity of Africa's weather conditions. The realization of this relativity will inform Africans to produce a unified and an enabling device in measuring their celestial-cosmic, terrestrial-ecological and lunar-phenomenological mechanism that is peculiar to African setting. We can achieve this by a conversational revision of time among African cultures in order to get the best among the diverse cultures and subsequently use it as a peculiar and a classical model of time for Africa. This conversationally agreed time will serve as a peculiar time for Africa and by Africans. With this in place, Africa will have devices that can comfortably compete with other western imposed devices thereby burying all lingering arguments about time, its existence and prospects in Africa.

CONCLUSIONS

This paper has examined the concept of time in Africa and her inherent challenge since the arrival of the Europeans. Time like other cherished values in Africa is at the danger of going into extinction due to European domination and relegation of African values. These impositions of values were being done without careful consideration of African peculiar environment. On the part of Africans, this paper recommends the need for conversations among African culture to get an alternative time among her heterogeneous cultures that will be by Africans and for Africans that can rival the western devices and also capture African peculiarities and uniqueness.

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