LITERATURE, LINGUISTICS & CRITICISM | RESEARCH ARTICLE

The Metaphorical Expression of Time in Igbo
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Abstract: The Igbo traditional system of reckoning time is cyclical, having recurring ecological and festive-cum-religious events as anchor points for its calculation. However, this system has been superseded by the western system which is linear. In spite of the apparent differences in the two systems, the same Igbo language is used for expressing them. This raises the question as to whether the same or different language structures or linguistic elements are used for both. This paper argues that, apart from the named entities in ecological and festive-cum-religious events, the same linguistic elements in the form of verbal constructions for the expression of concrete, physical activities, are metaphorically used for the expression of time in both systems. It seems therefore that SPACE dominates as the source domain for the metaphorical expression of time in the Igbo language. In addition, it can also be confirmed that the concepts of “Moving Time Metaphor” and “Moving Observer Metaphor” apply to the conceptualization of time in Igbo, whether expressed in the traditional or in the modern system of reckoning time in the language.

Subjects: Education Studies; Contemporary Art; Cultural Studies; Language & Communication; Languages of Africa

Keywords: Time; metaphor; space; moving time metaphor; moving observer metaphor

1. Introduction
Before the colonization of Africa by the European culture, and prior to the introduction of Western education and digital clocks and calendars, the Igbo culture had its unique ways of marking time. These unique ways were mostly dependent on religious and cultural festivals and activities which usually took place at specific times in the year. Such festivals include the New Yam festival, the Ofala festival, the masquerade festivals, amongst others, and the celebration of various deities. The yearly occurrence of these events was part of the elements used to reckon the annual traditional calendar, for example; the New Yam festival which is used to mark the end of one agricultural season/ the end of the rainy season. After the introduction of the Western time reckoning system (exemplified in the English language) into the Igbo communities, the western mode of expressing time gradually began to affect the traditional ways of expressing time, especially among the educated and elites in Igbo communities. However, the crux of this work is to describe how for the expressing of time in the Igbo language generally, the same verb forms that are used for expressing concrete and physical activities such as *ku*—“knock/hit”, *gafe*—“pass”, *ru*—“reach” etc, are metaphorically used for expressing abstract events such as time.

This paper goes into these issues as follows. The next section is the Literature review, which describes the concept of time generally and time in Igbo land, especially the traditional and the modern systems of reckoning time in the Igbo language. Section 3 presents the methodology adopted in this work. Section 4 presents the data and the analysis, starting with some of the Igbo
language structures in the traditional time reckoning system, followed by a comparison of these structures with the modern system. This section also discusses the nature of the conceptualization of time in Igbo, especially with regard to whether it is in the form of “Moving Time” or “Moving Observer” metaphor. Section 5 forms the summary and conclusion.

2. Literature review

2.1. The concept of time

Time is an integral aspect of human experience. Unlike space, time is not a concrete or physical sensory experience and it is “not conceptualized on its own terms” (Lakoff & Johnson, 1999:137). According to Evans and Green (2006), “Unlike the human sensory-perceptual apparatus that is specialized for assessing spatial experience, we have no analogous apparatus specifically dedicated to the processing of temporal experience. Despite this, we are aware of the ‘passing’ of time. .This awareness of time appears to be a wholly introspective or subjective experience” (2006:75).

According to Evans (2007:213), “The domain of time consists of actions and events which exhibit the properties of chronology (or progression) and duration”. That is why Lakoff and Johnson (1999:138) maintain that “the basic literal properties of our concepts of time are consequences of properties of events”. The authors then go on to present some of those properties of events that are used to conceptualize time as follows:

“Time is directional and irreversible because events are directional and irreversible, events cannot “unhappen”

Time is continuous because we experience events as continuous.

Time is segmental because periodic events have beginnings and ends

Time can be measured because iterations of events can be counted.”

(Lakoff & Johnson, 1999:138).

However, Evans (2007) also further explains that “the nature and structure of this domain relates to and derives from neurological and cognitive aspects of subjective experience including protracted duration and temporal compression.” (Evans, 2007:213). The author argues that the domain of time is encoded in language at two levels of representation: the lexical concept and the cognitive model. Therefore, as shall become obvious in the rest of this paper, the examination of TIME in any language would always involve taking these two levels into consideration.

2.1.1. Igbo Traditional System of Time Reckoning

According to Kalu (2002:353), “the Igbo perceive the universe and events occurring there as moving in a cyclical fashion … ” The repetitive movement of the sun and the moon, the unending cycle of the seasons of the year, the cycle of plant, vegetable and even human life, all these appear to have furnished the traditional mind with the perspective for time reckoning. That is why the Igbo calendar, known as Igu Aro lit. “to count the years” is based on the cycle of the moon, and each complete cycle of the moon is one month (otu onwa), and thirteen moons (months) make up one year (otu aro). The additional points for the calculation include the market days, and some traditional rituals (Ossai 2016:56), in addition to festivals for some deities.

Traditionally, the Igbo communities in reckoning the daily time, marked only the morning (ututu), the afternoon (ehihi), evening (mbede), night (abali), midnight (ndaeri/ettiabali). There was no daily marking or reckoning of hourly time. The actual reckoning of time in the course of a day was done using other entities like the sun and the human shadow (when the shadow is tall, it is morning; when it is short, it is afternoon; when it is tall with less heat, it is evening; and when it
can no longer be seen, it is night), or even flowers (whenever the flower opened up, it would be 4pm or 5pm). The Igbo kept the monthly calendar with the cycle of the moon and the yearly calendar with a combination of the lunar cycle and annual ecological or religious activities. Nevertheless, the annual traditional calendar was in great measure dependent on agriculture. This is because the traditional Igbo communities were predominantly farmers.

Below is a list of some of the terms used in marking or reckoning time in the Igbo traditional time reckoning system. They include the terms used to divide up the course of a day, the terms for the different months, and the designations of some of the traditional festivities. (Note that the Western months are deliberately included to make explicit the contrast). Below is a number of tables containing the Igbo terms used in marking or reckoning time in the Igbo traditional system. The Igbo time reckoning system is represented in tables below. Table 1 describes the different divisions of the day and their representations in Igbo. Table 2 represents the market days in Igbo which constitutes the Igbo week.

| Table 1. Division of the day |  |
|------------------------------|--|
| okwaökpa | At cockcrow |
| owuwaanyanwu | Sunrise |
| Ututu | Morning |
| Ehiehie | Noon |
| Mgbede | Evening |
| odidaanyanwu | Sunset |
| Anyasi/ abali | Night |
| Etitiabali/ Ndeeri | Midnight |

| Table 2. Market days |  |
|-----------------------|--|
| Eke | Eke Market day |
| Orie | Orie Market day |
| Afor | Afor Market day |
| Nkwo | Nkwo Market day |

| Table 3. Designations for the different months |  |
|-----------------------------------------------|--|
| Onwambu | First moon- first month |
| Onwaobuo | Second month |
| Onwaato | Third month |
| Onwaano | Fourth month |
| Onwaaise | Fifth month |
| Onwaisii | Sixth month |
| Onwaasaa | Seventh month |
| Onwaasato | Eighth month |
| Onwaiteghete | Ninth month |
| Onwairi | Tenth month |
| Onwairinaotu | Eleventh month |
| Onwairinaabo | Twelveth month |
| Onwairinaato | Thirteenth month |
The Igbo market days constitute the Igbo week, but will be discussed in more detail below. **Table 3** represents the thirteen months in the Igbo culture.

The Igbo year has a calendar of thirteen months, seven weeks in a month and four days (of market days) in a week and an extra day in the last month of the year. **Table 4** represents the yearly Igbo festivals and activities.

### 2.2. The modern system of time reckoning in Igbo land

The contact of the Igbo communities with the European, led to the introduction of foreign calendars and clocks. The people started paying less attention to the cock crow to mark the
break of day, since the clock could easily indicate what time of the day it was. With the western clock also came the hourly time (12am to 11.30pm), the 7 days of the week (Sunday to Monday) and the twelve month yearly calendar (January to December). The Igbo came up with different strategies for taking care of these. They coded the western time either with the same lexical items that existed in the language, or through outright formation or adaptation of the lexical resources of the language. Below is a breakdown of some of the expressions that have been formed to take care of the new system of Western time reckoning:

In the table below, the two words Onwa and Ubochi existed in the traditional system and corresponded with the English words for month and day respectively. The words awa and elekere are entirely new words, while nkej was an old word used for the new purpose of expressing time. Table 5 signifies the different terms used in describing time both in Igbo and in the western culture.

Below are examples of their usages. More shall follow in the detailed comparison of the two systems in section 4 below.

- Onwa Disamba = the month of December
- Afo 2020 = the year 2020
- Ubochi Friday = on Friday (literal: the day Friday)
- Elekere ato nke ututu = 3 o’clock in the morning (3a.m)

2.2.1. Empirical Studies
In this section, we shall review some of the works that have been done on Time in Igbo, both in terms of Igbo cosmology, as well as in terms of Igbo pre-history.

Onukawa (1998) investigates the Igbo unique names associated with the four market-day deities. The author aims at describing the common practice among the Igbo in the past and which is still maintained in some contemporary Igbo societies, that a child bears the unique name of one of the market-days (corresponding to the date of birth)—derived from the names of the deities that own the market days. Ebogu (1990: 49) corroborates this point as follows:

... the Igbo naming system establishes the identity and sex of a child the moment it is born. Indeed it asserts the child’s place in the cosmology of its people. The oneness of the four corners of the universe is expressed in the union between the four market-days of the week each forming the diurnal unit for computing the people’s calendar. Some local variation is observed in the form of market-day names according to dialect area such as Okorih ‘male of Orie’, Okafor’male of Afo/Aho’ (Owerri, Aba, Umuahia areas), and Okoli/oaye ‘male of Oreo/Oye’ (Onitsha, Asaba, Enugu areas). The variations also reflect the distribution of the market-day personal names in the various sub-cultural and sub linguistic areas.

A male child who bears the name Nwaaofo, “child of Afo” at birth matures to Okafo “adult male of Afo”, while a female who bears Odafo “fame of Afo” at birth matures to Mgbaofo “adult female of Afo”. The above usage with respect to young female market-day names extends only to UdeAfo/Nkwo. Ude does not combine with Eke and Oye (Orie), rather we have Akueke “wealth of Eke”, Ugoye “eagle of Oye (Orie)” (which are still however associated with “Mgb Eke/Oye” as age antonyms). Ugoye “fame of Oye” is a male name in Awkunaoano area (Enugu State), where esteem is highest in the name borne by the male. The author outlines different hierarchies of the market days, according to people’s various metaphysical beliefs on the emergence of market-day deities, their presumed strength, order of seniority, benevolence and even their destructive abilities.

Okafor’s (1998) work highlights the negative impact of the western culture on this system as follows: These sacred customs and traditions amongst others were breached by the arrival of the missionaries and colonialists who began a sustained and systematic attack aimed at destroying anything they could not rationalise. The Chukwu of the Igbo and the cult of Mother Earth came
under a sustained and relentless attack, because they were at the core of the Igbo traditional religion which the missionaries wanted to wipe out as they saw it embodying the exact opposite of their Christian precepts. In fact, the European missionaries found the Igbo gods quite threatening as they conflicted with their teaching of a monotheistic Christian God. The removal of this traditional religion of course also meant a removal of the kind of time reckoning associated with it. Hence the replacement of the traditional time reckoning system with the new, western time reckoning system facilitated by the Christian missionaries.

Korih (2007) describes Igbo identity and attitude to farming. He aims at investigating the changing nature of Igbo agriculture and the transformations that have occurred since the beginning of the 20th century and how it has evidently declined the importance of yams. Yam was the most widely cultivated crop among the Igbo until recent times, that when the Igbo talk about farming they talk about yam. The cultivation of yam was governed by strict rules and was a highly ritualized process. Yam production often involved elaborate ceremonial rituals at the planting and harvest seasons. The New Yam festival marked the harvest season when sacrifices were offered to Ahialoku the yam spirit to ensure good yield and continuity of life itself. The ritualized process associated with yam was part of what anchored the traditional time reckoning system in the consciousness of the Igbo.

Babatola and Alokano (2013) make reference to the time reckoning system in Achebe’s 1958 “Things Fall Apart”. They observe the use of expressions such as;

Cock crow until chicken went to roost … “the drought continues for eight market weeks … ”
Ikemefuna was ill for three market weeks … Ikemefuna came to Umuofia at the end of the care free season, between harvest and planting … “yam, the king of crops, was a very exacting king … For three or four moons. . One could observe the uniqueness in Achebe’s expression of time, linking time to events such as the moon season, harvest season, planting seasons and so on. This is in line with the traditional system of time reckoning, but contrary to the linear time concept in western thought, with an indefinite past, present and future.

Ossai (2016) investigates Time in Igbo Cosmology. He argues that time controls the entire socio-economic and religious life of the Igbo, the Igbo have an idea of time. He reveals that reckoning time in Igbo traditional view is essentially characterized by two realms; the visible and the invisible realm. The time of the day, calendar and market days in Igbo believe system can be described as rendezvous of all physical and spiritual beings. This is because; markets are conglomerates of human and spirits (market is for both spirits and human beings).

Ossai opines that the Igbo reckons time in two categories, the human and the ecological times. The human time is further divided into the individual and the collective (community) times. While the individual human time is the transitional and social moments of man’s life span: birth, puberty, initiation, marriage, title taking, death, funeral; the collective or community time represents the moments marked by the community collectively like the new yam festival, masquerade outing, deity ritual etc. The ecological time on the other hand, is related to different seasons which are backed up with religious activities such as izu mwo (ritual week), onwa olu (period of farming) and onwa ir iji (the yam festival period).

The author further describes the relevance of all these to time in Igbo, and divides them along the lines of religious and political relevance. With respect to the religious relevance, he posits that, the Igbo concept of time is not only physical, but also spiritual and it is based on this belief that Igbo people still honestly adhere to their system of time reckoning which is not definite like the Euro-American system of time reckoning. It is this belief in the presence of the invisible beings at all times that makes the Igbo man mark all times with rituals. This reaffirms the discovery that time in Igbo land is rooted in market days which are dedicated to ancestors, deities and other spiritual forces. Further observation of the religious relevance of time is the fact that parents in Igbo land tend to name and dedicate their children to the spiritual forces believed to be custodian of the market days that mark the time the child was born. This
has led to names such as Nweke, Nwoye, Nwafo and Nwankwo for males and Mgboye, Ekemma for females. The time a child is born in Igbo land determines the name and destiny of the child.

The author concludes that with regard to the political relevance, the political life in Igbo traditional community depends on the intricate relationship between the people and the belief that the invisible influences the visible, like, in determining the time or period for the coronation of a traditional ruler.

Eze-Uzoamaka (2018) examines the historical awareness of cultures of indigenous people of Nkwerre Anambra State and their characteristic way of observing time. In describing time in Nkwerre, the author reveals that just like other Igbo communities, the Nkwerre people have four market days in the traditional week-Nkwo, Eke, Orie and Afor. The four days refer to the shorter market week (izu nta), while the eight-day week, made up of the same days of the week counted twice over, is referred to as the longer market week (izu ukwu). Time is marked in Nkwerre through annual traditional or ritual calendar of events, instead of actual numerical or mathematical time. They tend to discuss events and explain when they actually took place, rather than affixing numerical values to past events. At the beginning of the traditional calendar, the priests offer sacrifices to Ajimiri, the chief deity, under the huge tree at Nkwo market of Nkwerre known as okpuru abosi. The author states that these sacrifices were meant to solicit the help of the gods throughout the period of the planting season to prevent problems with the planting of yams, the clearing of the land, the planting of crops, to the period of harvesting of the crops. Clearing of fields in Nkwerre coincides with the month of March in the European calendar, the planting season coincides with April and May; harvest of grains is in July, yam harvest in August, and the agricultural dance festival, Amuma, in October.

The author concludes that time measurement in the Nkwerre past, was achieved through such natural means as the shadow produced by the sun, the cockerel in the morning and the sound of the owl in the night. The annual calendar depended entirely on agriculture. It was cyclical in nature, event-controlled and not by mathematical progression of Western chronology.

Finally, it can be seen from the few works on time reckoning in Igbo, that the emphasis has been on the nature of traditional time. The present work differs from these previous works in not only acknowledging that the Igbo have always reckoned time, it also goes further to examine the linguistic expressions of time in the traditional system, and compares them with the presently dominant western system.

3. Methodology

3.1. Research method
All research works, whether quantitative or qualitative, must involve an explicit, systematic approach to finding out things, using the method most appropriate to solving the problem (Hancock et al., 2007). According to Lampek and Kives (2015:23);

"the results of quantitative researches supported by numeric data are suitable for verifying hypotheses in many fields, but they often record only information occurring on the surface and do not allow a deeper understanding of problems, processes and human behaviour. Qualitative research methods, in which research focuses on a qualitative insight into phenomena, collecting and analyzing opinions, attitudes and beliefs, are meant to overcome these shortcomings. Such investigations carry out a detailed and thorough exploration of the topic examined and use a small sample, in which representativeness is not an objective."

A qualitative research aims at description and interpretation, which usually form the basis for the development of new concepts or theories. It uses the inductive process to reason from a specific situation to a general conclusion (Wiersma & Jurs, 2005). Hence, qualitative researchers study
a phenomenon in an open-ended way, without prior expectations, and develop hypotheses and theoretical explanations that are based on their interpretations of what they observe. The product of a qualitative research is usually a narrative report with rich description rather than a statistical report. (Johnson & Christensen, 2008). Qualitative research works therefore aim at explaining rather than measuring or quantifying. That is the approach adopted in this paper.

The data for the work was collected through a non-probability, purposive sampling from the pool of linguistic units of the Igbo language for the expression of time, both in the traditional and the modern systems.

This work also adopts the Conceptual Metaphor Theory (CMT) and applies it to the description and explanation of the TIME in Igbo traditional and modern time reckoning systems.

The Conceptual Metaphor theory relates to the understanding and mapping of structures which originally belong to one domain (say for example, the domain of TIME) and using them to refer to another structure in another domain (SPACE). The domain of SPACE is usually marked by physical entities, while the domain of TIME involves abstract entities and events. This approach is seen as the most appropriate for this paper, because it can be observed that in some, if not most cases, the verbs used in to express time are originally used in the domain of SPACE to express activities involving physical objects.

4. Data presentation and analysis
The data presentation shall take the form of first going into the conceptualization issues in the expressions of time in Igbo, to be followed by a comparison between the traditional and the modern systems, and shall end with an examination of the issue of “Moving Time” and “Moving Observer” Metaphors.

4.1. Conceptual issues of time in Igbo
In the Cognitive Linguistic view, metaphor is defined as understanding one conceptual domain in terms of another conceptual domain. A conceptual domain is any coherent organization of experience. For instance, we have organized knowledge about journeys that we rely on in understanding life (Kövecses 2010:4), the same way that we understand one conceptual domain in terms of another. For instance, we could talk about life in terms of journey, argument in terms of war, love in terms of journeys, theories in terms of buildings, and so on. These are Conceptual Metaphor which, according to Evans (2019:35), involve structuring and understanding one domain of experience in terms of another domain of experience. Furthermore,

‘Conceptual metaphors often consist of a series of conventional mappings which relate aspects of two distinct conceptual domains. The purpose of such a set of mappings is to provide structure from one conceptual domain, the source domain, by projecting the structure onto the target domain. This allows inferences which hold in the source to be applied to the target.’ (Evans, 2007:136).

In conceptual metaphor, concepts from one domain, usually the source domain, are used in understanding concepts in another domain, the target domain. According to Kövecses, a conceptual metaphor consists of two conceptual domains in which one domain is understood in terms of another. In this case, concepts that are concrete and involve physical impacts (domain of SPACE) are metaphorically used to express abstract events in the domain of TIME. This also applies to the expression of TIME in Igbo, where verbs used for the execution of concrete physical-spatial activities are also used to express TIME. The Igbo examples below are illustrative of this point.

(1) Gini na-aku?

what AUX-knock
What is knocking/hitting
‘What is the time?’

The verb involved in the above sentence is *ịkụ* which means “to hit/knock” The verb expresses the physical act of knocking on an object with a hard surface. It is the only verb used to express knocking on the door, for example, *ịkụ aka n’ụzo* “to knock” (literal: knock hand on the door = > knock on the door). Other examples of the use of this verb to express concrete physical activities within the domain of SPACE include:

(2) *ịkụ oka*: = to box [literal: “to hit boxing/blow”]
(3) *ịkụ aka*: = to clap [literal: “to hit hand”]

In terms of the connection of this verb to indicating time, the verb went through a shift from the original domain of physical activity of knocking/hitting an object, to being used to refer to the colonial clock that always went “Tick! Tick! Tick!” as though continuously knocking/hitting at something. This is an activity within the domain of SPACE that seems to be reflected in the movement of the hands of the clock. The end result of this ticking/knocking sound is that it indicates the different point in the TIME as it moves. Hence, each sound “announces” a position in the movement of the hands of the clock. That is why to ask for the time is literally phrased as:

(4) *Gịnị ka elekere na-akụ?*

What that clock AUX-knocking

“What is the clock knocking?”

This is realized in normal speech as:

(5) *Gịnị na-akụ?*

What AUX-knocking

(Literal: What is knocking?)

“What is the time?”

In (5) above, the verb *ku* no longer refers the concrete heating on a hard surface. For Igbo speakers, the knocking sound on the clock is an indication of knocking in time, and each knock indicates a point in time i.e. “announces” a point time. Hence, knock has been mapped from the physical SPACE (the source domain) to the abstract domain of TIME (the target domain). Another noteworthy point is the fact that an inflectional change of the verb *ku* does not affect its role here. Note the change on the verb *ku* in the sentence below:

(6) *O kuo-la elekere ato nke ụtụtụ*

It knocked-PERF o’clock three of morning

(Literal: ‘It has knocked 3 in the morning.’)

“It is 3 am”
Here, the verb *iku* is inflected as *kuola* “has knocked”. This is the perfective form of the verb, which has the simple, completive meaning of “it has hit/knocked 3am”, and whose English equivalent is “it is 3o'clock”. Metaphorically, the knocking on the clock has reached a particular spot (in this instance, 3o'clock in the morning). When one asks “what time is it?”, it is as though the person is asking, “what has the knocking hands of the clock indicated?” or “What has the clock announced?” These usages do not occur within the traditional time reckoning system where the hour and minutes are not calculated or measured with any instrument. This also explains why the verb *iku* is not used within the traditional system.

The next example is more interesting, because it involves the perfective form of the verb *iji* “to hold”, *ji-ri-la* “has held”, and the verb *gafee* “pass by/beyond”. The first verb *iji* “to hold”, involves holding physical objects like *iji okwute* “to hold stone”, *iji mma* “to hold knife”, while the second verb, *gafee*, is a motion verb that means “go beyond a point/location”. Note however, that *gafee* is a compound verb that is made up of the two verbs *ga* “go” and *fe* “pass by/beyond”, and means “go beyond”. It is used to express or indicate concrete motion of an animate entity going beyond a spot or boundary. Both verbs, *iji* and *gafee*, involve non-abstract and concrete activities within the domain of SPACE, either in terms of the manipulation of a physical object or the concrete motion of going beyond a particular spot or location. The significance of the two verbs here is that concretely, someone can hold a material object as he/she goes by a spot or location. Put differently, someone can go beyond a spot or location while holding an object in his hand, like a student holding his ice cream in his hand while going beyond the school gate. As shall become obvious in the explanation of the sentences below, it is this particular scenario within the domain of SPACE that is mapped unto the abstract domain of TIME through the use of both verbs.

But first the verb *ji*. In addition to the already cited examples of *iji okwute* “to hold stone”, *iji mma* “to hold knife”, where the verb simply indicates holding some objects in the hand, the verb also has an additional meaning that is relevant in the present discussion. For example, it is also used in serial verb constructions to encode the manipulation of an instrument:

(7) O ji egbe gbuo ehi

(Literal: He hold gun kill cow ‡He used a gun to kill a cow)

‘He killed the cow with a gun’.

Here, the verb has the equivalent of the English preposition “with” as its meaning, and this is also the meaning it retains in its use to express time:

(8) O ji-ri-la nkeji ise gafee elekere abuo

It hold-PST-PERF minutes five pass clock 2

(Literal: It has held 5 minutes go beyond 2o'clock)

‘It is 5 minutes after 2 o'clock.’

In the previous paragraph above the example was given of a student holding his ice cream in his hand while going beyond the school gate. This is what is conceptualized within the domain of TIME. Here an indefinite entity, signified by the indefinite pronoun *O* “it”, has gone beyond a location in TIME, two o'clock, while holding five minutes. The minutes are in place of physical objects that can be held together. It is once again also noteworthy that the verb *ji* is not used in the traditional system of time reckoning, because the system has no hourly time scale, neither does it have such a contrastive time mechanism of “before/after” of the hourly time scale.
The verb gofe, as has already been pointed out, literally entails “to go/pass beyond” anything that has a spatial dimension, a place, a person or a thing. Metaphorically, it is used in the abstract domain of TIME to indicate “going beyond a point in time”, “to pass a particular time”. The understanding of holding an object to pass a location (source domain of SPACE) is thereby conceptualized in terms of TIME (the target domain) representing the act of holding a certain number of minutes while passing a particular point in time.

The verb gofe has been discussed in example (8) above. Other verbs of concrete motion within the SPACE domain are ru “to reach a location” and fo, “to remain/be left over”. The verb ru is used in the domain of SPACE to represent reaching i.e. getting to, a particular spot or location. In the domain of TIME, it entails ‘to reach/get to'a point in TIME). The last verb, fo, is used to express the fact that some quantity of any entity is left over, after a larger portion has been taken away. In the domain of TIME, it is conceptualized or measured as the amount of minutes remaining to reach a particular point in time. Below are examples of the usages of these verbs within the SPACE domain, followed by their usage within the TIME domain.

(9) O go-fe-re ulo m

He/she go-pass-rv(past) house my

‘He passed by and went beyond my house’

In the above sentence only the concrete, physical motion of going beyond the location, ulo m “my house”, is expressed. A similar concrete meaning is expressed in the next sentence through the verb fo “to remain/be left over (from a certain initial quantity)”

(10) Ego m fo-ro nari naira

Money me remain- rv(Stative) hundred naira

‘I have hundred naira left’.

In sentence (10) the subject initially had some money, but what is left of it now is only one hundred naira. Note that the subject of the sentence can be meaningfully replaced with any other concrete entity. Now consider the use of both verbs within the domain of TIME. However, with regard to time, the verbs are conceptualized in sentences like the following:

(11) O ji-ri-la nkeji iri na ise ga-fee elekere ato n’ehihie

It hold- PST-PERF minutes ten and five pass beyond clock three in noon

“It is half past three in the afternoon”.

The conceptualization of the event here has already been touched upon in the course of discussing example (8) above. The additional point here is simply to draw attention to the fact that adverbial expressions (like n’ehihie “in the afternoon”) can be correctly added to buttress the period of the day. With regard to ru “reach/get to”, note its combination with the verb ku within the TIME domain in sentence (12) below, and how ru can be replaced with the already discussed verb in sentence (13).

(13) Ofo-ro nkeji ato ka o ruo elekere asato nke abali

It remain-rv(stative) minutes three that it reach clock eight of night
(Literal: ‘it is 3 minutes for it to reach 8 o’clock in the night.’

‘It is 3 minutes to 8 in the night’

Compare the above sentence with the following:

(14) O fo-ro nkeji ato ka o kuo elekere asato nke abali

It remain-rv(stative) minutes three that Pro knock clock eight of night

“It is three minutes to 5 o’clock in the evening”.

Sentences (13) and (14) literally express the same time but with a slight difference in perspective brought about through the two verbs ru and ku. With ru the emphasis is on the time that is left getting less and less, with the indefinite pronoun (the TIME entity) getting closer and closer to the designated time. In Langacker’s (2008) terms of sequential scanning and summary scanning, one can describe the verb ru as adding a sequential perspective to the whole TIME event. The verb ku adds a cumulative perspective that simultaneously stretches over the remaining minutes up to the designated hour; this is the perspective that it the verb ku adds to the whole TIME event. The two verbs can therefore be described as having a contrastive sequential and summary scanning effect within the domain of SPACE, which they also have in their usage within the domain of SPACE as concrete motion verbs of the Igbo language.

The above examples illustrate how these verb of concrete motion and activities, which do not play any role in the traditional system, are used metaphorically to express the western time embodied in the clock and its indication time. In the above examples, verbs for concrete activities, like “iku” (to knock/hit), “kuola” (has knocked/hit), “jirila” (has held) and “gafee” (passed beyond), “fo” (remain) and “ruo” (reach), have been metaphorically used to express time. Their source domain is SPACE, with TIME as the target domain.

Within the conceptual metaphor view, researchers have suggested that abstract concepts (such as time) import their structure through conceptual projection from more concrete domains (such as space). The above Igbo examples demonstrate and confirm this view. Hence, it is evident from our illustrations of time in Igbo in this paper, that the source domain is the domain of SPACE while the target domain is the domain of TIME. This is to say that concrete and physical terms from the SPACE domain are metaphorically used to express the abstract domain of TIME. The verbs that are used for this include: ku- “to knock/hit”, ru—“to reach”, gafee—“to pass (by)” etc. Note that “an abstract domain is a domain which is not directly grounded in embodied experience and so stands in contrast to a concrete or basic domain. Abstract domains include marriage, love” (Evans, 2007:1).

4.2. Comparison of the structures for expressing time in the traditional and the modern systems

In this section, we shall further examine more sentences used in expressing time in the traditional system and compare them with their possible equivalents in the modern system.

(15) Traditional: Nzuko ahu ga-abu n’ubochi Nkwo n’odida anyanwu

Translation: The meeting will hold on Nkwo day at sunset

Modern: Nzuko ahu ga-abu n’ubochi uka n’elekere ise

Translation: The meeting will hold on Sunday by 5pm
Here, the agreed time period for a meeting is expressed in the traditional system through the phrase n’u’bochi Nkwo n’o’dido anyanwu “on Nkwo day at Sunset”. The exact hour is not given and can also not easily be given within the traditional system, in contrast to the modern system that specifies the hour n’u’bochi ika n’elekere ise “on Sunday by 5pm”. The traditional week has now been superseded by more specific the seven-day week and twenty four hour system. The same phenomenon can be confirmed in all the sentences below, where the sentences involved are in bold and italics.

(16) Traditional: O ga-agucha akwukwo n’ọnwa mbu afọ abuo di n’iru

Translation: He/she will complete his/her studies in the first moon (month) in two years in front.

Modern: O ga-agucha akwukwo n’ọnwa January n’afọ 2023
Translation: He/she will complete his/her studies in January 2023

(17) Traditional: Nwanne m lotara n’ọnwa iri ji afọ gara aga

Translation: My brother/sister came back in the month of new yam festival in the year that has gone

Modern: Nwanne m lotara n’ọnwa August n’afọ 2020
Translation: My brother/sister came back in August 2020

(18) Traditional: Anyi ga-ekuli njem ahu n’ọkwa ọkpa

Translation: we shall get up and leave for that trip at cockcrow

Modern: Anyi ga-ekuli njem ahu n’elekere ise nke ututu
Translation: we shall leave for that trip at 5am

Finally, it is not obvious that the modern and more definite time reckoning system has gradually but finally replaced the old, traditional system with its general time reckoning system. In addition, such a definite and terminative verb as ku does not occur in the traditional system, which does not have a scale to allow for indicating particular points in time. However, the other verbs like ru—“to reach”, gofēe—“to pass (by)”, which both indicate a more general phase or period of time, either before or after the designated point in time, can be used in both the traditional and the modern time reckoning systems.

4.3. The issue of “moving time” and “moving observer” metaphor

The ideas of “Moving Time Metaphor” and “Moving Observer Metaphor” were first introduced by Lakoff and Johnson (1980:43). According to the authors, time in English is structured in terms of the “Time is a Moving Object Metaphor” with the future moving towards us and “Time is Stationary and We Move Towards it”. These are the two ways we conceptualize the passage of time. In one case, we are moving and time is standing still, while in the other case, time is moving and we are standing still.

4.3.1. Moving time metaphor

In “moving time metaphor”, time is conceptualized as being in motion towards a static observer. This can be drawn from the description by Lakoff and Johnson (1999:141); “in ‘moving time metaphor’, there is a lone, stationary observer facing a fixed direction and there is an indefinitely long sequence of objects moving past the observer from front to back”. Evans (2019:106) also
describes the “moving time metaphor” as TIME IS (OBJECTS IN) MOTION ON A PATH. Here, the future moves towards us. One conceptualization of time common to many cultures is the conceptual metaphor TIME IS A MOVING OBJECT (Lakoff & Johnson, 1980:41–45). Examples from (Lakoff & Johnson) include:

(19) The time will come when . .
(20) The time has long gone since when . .
(21) The time for action has arrived.
(22) I look forward to the arrival of Christmas.
(23) Before us is a great opportunity and we don’t want it to pass us by.

Examples extracted from Evans (2019:106) include:

(24) The time for action has arrived
(25) The summer just zoomed by
(26) I can see the face of things to come.

Here, the observer is in a static position while time is coming towards him. This conceptual metaphor can also be confirmed for Igbo in the sentences below. One can see in these Igbo sentences that both TIME itself and natural events are conceptualized as coming from the front of a static observer and moving towards the observer.

4.4. Igbo examples of moving time metaphor

In these examples, TIME and other events are conceptualized as coming to or approaching a person being addressed (i “you”), or as a natural event (sentence 28) or a planned event (sentence 29) that are approaching.

(27) Oge na-abia mgbe i ga-agba

    Time AUX-come when you AUX-understand

    “The time will come when you shall understand”.

(28) Mmiri na-abia

    Water AUX- come

    “Rain is coming”

(29) Ule anyi ji oso abia

    Exam our hold run come

    “Our exam is fast approaching”.

The verb bia “come” is, like the English equivalent, a concrete motion verb that indicates motion towards the speaker. They still indicate motion in the above sentences, but it is motion in TIME and towards an observer. Therefore when the verb bia is used in the domain of TIME, it conceptualizes
the movement of an event (of time) towards a static observer. Compare these with the already discussed concrete motion verb, gafe, which in the sentences below are in the two forms of realizing the perfective form in Igbo, agafego and agaala:

(30) Agbamakwukwo ahu a-gafe-go

Wedding that SUF-go by-PERF

“The wedding has passed.”

(31) Oge a-gaa-la maka I ga ahja

Time SUF-pass-pst because Pro go market

“Time has passed for going to the market”.

Although we have discussed the role of this verb gafe, we wish to briefly reiterate the points here. Metaphorically, this concrete motion verb is used in the domain of TIME to describe the passing of abstract events such as wedding time (example 30) and market time (example 31). In the additional sentences below, an abstract noun (obibia “the coming of” in sentence 32) and an adverbial phrase (Oge nküzí “lecture time” in sentence 33) are now the named entities that are in motion:

(32) Anyi na-atuanya obibia ekeresimesi

We AUX-looking coming Christmas

“We are looking forward to the arrival of Christmas”.

(33) Oge nküzí a-agba osó

Time teach AUX-run race

“The lecture time is running”.

Example (32) involves the verb bia as already discussed above in examples (27–29). Here it is as if the subject of the sentence, Anyi “we”, are on the lookout for the approach of Christmas. The verb in example (33) is gba osó which means “run”. This verb refers to the motion of any animate entity within the domain of SPACE, for example: M na-agba osó “I am running”. Nkita na-agba osó “the dog is running”. But in sentence (33), it is metaphorically used to refer to an abstract event (lecture time), as though the lecture time is running, i.e. in motion. In both sentences, the event is conceptualized as coming from the front, towards a static observer.

4.4.1. The moving observer metaphor
In this metaphor, the observer, instead of being fixed in one location, is moving (Lakoff and Johnson 1999:145). Evans further explains that here time is understood as being static, while the observer is moving towards it. We and the present are moving towards the future. It is represented as TIME IS (OUR) MOTION ON A PATH (Evans, 2019:106).

Examples include:

(34) We are getting close to the end of the term

(35) We are fast approaching decision time
(36) He left at 10 o'clock

(37) We are halfway through April

4.5. Igbo examples of moving observer metaphor

In the Igbo examples below the verbs involved are ru (already discussed in the previous sections above), ga’go, kwudo “meet (on time)” and chuso “pursue/run after”, and their inflected forms in the sentences are agafo “has gone (beyond)” eruugo “about to reach” for ru, kwudoro “met” for kwudo, achuso:

(38) Anyi e-ru-be-go ngwucha afo a

We PREF-reach-INCH-PERF the end year DET

(Literal: We have started getting close to the end of the year.)

“We are getting close to the end of this year.”

(39) Anyi a-ga-fe-go oge ịko ọrụ

We PREF-go.beyond-PERF time to plant work

“We have gone past the planting season”.

(40) Ekwudo-ro m ule mbido

PRO-meet-rV(past) me exam starting

“I met the opening test”.

(41) Nwa ji jì oso achuso afo abuọ

Child your hold run pursue year two

(Literal: “your child hold run pursue two years”)

“You child is fast approaching two years.”

In sentence (38) the inflected form of the verb iru, which is eruugo, is used to refer to the proximity of the speaker to the time of the event being described (in this instance, the end of the year). The subject, Anyi “we” is the Moving Observer that is getting closer and closer to the end of the year that is static. In contrast to this, the verb agafo “has gone beyond” in sentence (39) presents a different conceptualization, where the same subject, Anyi “we”, still conceptualized as the Moving Observer, is in motion within TIME but passes by and goes beyond the planting season. The contrast between the two sentences is that the Moving Observer in the first is approaching the static point in time, while in the second sentence the same Moving Observer goes beyond a static point. In (40), kwudo has SPACE as its source domain, where it means “to meet up with someone or something timely enough (before something else intervenes)”. This understanding of the verb is mapped unto the target domain of TIME to express the idea of meeting up with the particular time/event ule mbido “first test”, before the event passes by or another thing intervenes. The Moving Observer is the first person pronoun M “I”. In sentence (41), the verb chuso “to run after or pursue” has its origin in the domain of SPACE (the source domain), where it refers to running after/pursuing any physical entity. Here same verb is conceptualized within the domain of TIME (the target domain) to describe a movement towards a fixed point in
time. The subject of the sentence, the child, is the Moving Observer, who is conceptualized as quickly after an entity, *afọ abụo* “the age of two”, at a fast speed and is seriously gaining grounds over it.

Finally, the above analyses demonstrate that the expression of TIME in Igbo is encoded through both the “Moving Time” and the “Moving Observer” metaphors.

5. Summary and conclusion

Traditionally, Igbo communities did not have the representations of the 24 hour time division. The effect of this was that a certain exactness in terms of indicating definite points on such a time scale did not exist within the Igbo traditional Time Reckoning System. Instead, the form of exactness of time within the system had as its focus only the cyclical natural seasons, events and festivities. For this reason, the traditional time reckoning system could not be used for the modern hourly reckoning. Nevertheless, the lexical units of the language were not abandoned the same way that the traditional system has gradually fallen into disuse. Instead, some lexical resources of the language like the verbs *bia* “come”, *ru* “reach”, *fo* “be left over”, *chuso* “run after/pursue”, *gafe* “pass/go by/beyond”, *kwudo* “meet (on time)” and *ji* “hold”, which existed within the traditional system, were co-opted to serve for the expression of TIME within the modern system. However, the verb *ku* does not occur within the traditional system, which could be as a result of the following two reasons. The first is that the colonial clock and the *Tick! Tick! Tick!* sound associated with it had (and still has) for the Igbo speaker some mental associations with the Igbo verb *ku*. It is therefore not surprising that Igbo speakers started using this verb to not only designate this sound made by the clock but to also extend its meaning to include the indication of the hours of the day. With this extension, the verb *ku* within the domain of TIME now means to say the time. This as can be seen in the last two sentences in this paper:

(42) Gini na-aku?

what AUX-knock

‘What is knocking/hitting

‘What is the time?’

(43) Elekere asaa aku-ola

Clock seven knock-PERF

(Literal: ‘Clock seven has knocked’)

‘It is seven o’clock.’

Finally, below is the summary of the verbs in the domain of SPACE that serve for mapping across to the domain of TIME. Table 6 describes the Igbo verbs used originally in the domain of space and their interpretations in the domain of time.
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