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## Conceptualization of Time in Cultural Landscape Transactions of a Nupe Community in Central Nigeria

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Cultural landscapes are made up of transactions which are time dependent. However, time conceptualization is contextual and culturally distinctive. The conventional concept of time collectively subjects people to clocks without consideration given to contextual differences of cultures. The understanding of community's experiences, its past and the projections of its future lies in the understanding of the cultural conceptualization of time. However, there exists little or no much study on the explicit examination of the relationship between the concept of time and cultural transactions especially in minority ethnic groups of developing countries. Thus, this research qualitatively explored the conceptualization of time in a rural Nupe community in central Nigeria. The content analysis of the data elicited showcases Nupe community's conceptualization of time to be tied to natural ecological indicators and sequential performance of farming activities. The finding showcases time for the natives to be tied to the sequential performance of activities.

Keywords: Conceptual Time, Cultural Landscape, Transactions, Farming, Nupe

### **1. INTRODUCTION**

The pace of cultural landscape transactions is linked to the flow of time that people experience. Time remains the key component of work as it is used to quantify the duration of tasks<sup>1</sup>. The measurement of time from history has evolved, taking different dimensions right from the discovery of the Sundial or the shadow clock as far back as 5,500 years ago when people use the shadow cast on an upright post to tell time . Over time the clock time was developed towards giving a universal premise for the coordination of people activities. However, before the inventions of clocks, events were triggered by other actions and not by the clock time  $^{3}$ . Therefore, time utilization is not limited to the quantification of duration of task, but also includes its use for the prediction of future activities. This means that time conceptualization is tied to cultural transactions. More also is that cultural landscapes do possess clear identity and also embedded with meanings <sup>4</sup>. As such the perception of time varies across cultures <sup>4</sup> Furthermore, the traditional economic transcation of communities also has an effect on the conceptualization of time

The major economic activity of most African rural community is farming <sup>6</sup>. In fact, farming and agricultural activities in Africa contribute extensively to the economic wellbeing of the population <sup>7, 8</sup>. As such, one of the major cultural practices includes the determination of time for agricultural activities. Time despite its multifaceted dimensions is always embedded in human experiences <sup>9</sup>. For example, in Okavango Delta, Botswana, farming in the locality is done based on some natural indicators of the landscape which includes the

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appearance of floods <sup>10</sup>. In other words, indigenous people over time do develop indigenous knowledge for their agricultural activities such as time for the preparation of soil, planting, and harvest. This indigenous time conceptualization, therefore, becomes part of the cultural heritage of communities. Markedly, cultural conceptualization of time is related to the past, the present and future <sup>11</sup>, it also involves continuity and discontinuity of cultural transactions <sup>12</sup>. This suggests that the past and the future of cultural landscapes can be effectively understood through the indigenous perception of time <sup>13</sup>. Accordingly, historical time from shared experience has long been asserted to be key to the understanding of communities <sup>1</sup> Similarly, the cultural conceptualization of time is important because it gives a cue to people's sense of place, identity, and beliefs. This is because, cultural values are embedded within the common notion of time of a given community. It therefore suggests that the values and beliefs of people require an emphasis on concepts of time, especially if issues about cultural landscapes are to be deeply understood <sup>12</sup>. More also is that the deep exploration of cultural landscape concept of time by the indigenous people does highlights embodied tangible and intangible heritage values of such communities <sup>15</sup>. Consequently, this study explores the conceptualization of time in a rural Nupe community in Nigeria. The choice of Nupe community is hinged on its being identified to be rich in cultural heritage but with little cultural landscape studies <sup>16-18</sup>.

### 2. RESEARCH METHODOLOGY

### 2.1. THE STUDY COMMUNITY

Doko, the study community is located in Niger State, central Nigeria. The community's dialect is Nupe and thus they are

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called Nupes. The main economic activity of the community is subsistence agricultural <sup>19</sup>. They are mostly engaged in the cultivation of cereals which include rice cultivation on the flood plains while other crops such as sorghum, millet, bulrush millet, cassava, sweet potatoes, groundnut, and melon are cultivated on the highland. The physical landscape character of the community is surrounded by a hill from the Southwestern side to the Northwestern side as indicated in Figure 1a and 1b

### 2.2. DATA COLLECTION AND ANALYSIS

The qualitative methodology was chosen towards understanding time based societal events of the study community <sup>20</sup>. In doing so, participants were asked to explain their lives in their own voices <sup>21, 22</sup>. This entails narratives in the local dialect of Nupe which was an outcome of a semi-structured interview. The interview questions were focused on conceptualization of time for community's transactions. To ensure that adequate time-based transactions were captured, respondents were also asked to narrate their previous year's activities. The conduct of 12 interviews showed that adequate information about time-based transactions of the community had been captured, due to saturation <sup>23, 24</sup>.

It is to be noted that, the biographical position, such as ethnicity of researchers could have an effect on the data elicited <sup>25</sup>. It is thus worth mentioning that one of the researchers belongs to the Nupe ethnic group as such, He is familiar with the community. The familiarity with the studied community contributed to the respondent's willingness towards giving information without the feeling of intrusion <sup>26</sup>. Furthermore, it also served as a collaborative as well as an experiential account of both the researcher and the respondents <sup>27</sup>. While the weakness associated with a researcher's bias towards the study of self was checked through other co-authors probes of data collected as well as its analysis <sup>28</sup>.

Furthermore, the audio recording of the interviews in Nupe was transcribed into English which was analyzed using computer based software QSR Nvivo 11. This is to allow for the quick and concrete deduction from the information gathered from the community <sup>29</sup>. Thereafter, the analysis showed the emergence of activities and their cultural indicators. It is to be noted that during the process of analysis, time conceptual narrations of respondents mostly corresponded with each other, however, in situations where they varied, the two accounts were reported.

### 3. RESULTS AND DISCUSSION

### 3.1. CONCEPTUALIZATION OF NATIVE CALENDAR

The results showcase time-based transactions of the community to be connected to farming. This is not surprising because, it constitutes like most African rural communities, the major economic activity of the community <sup>7</sup>. However, the community has its farming activities classified into two, namely the highland and the floodplain farming. The difference in landscape character distinctively characterizes the difference in the type of crops cultivated. Thus rice, the main cash crop is cultivated in the flood plains; while other crops such as the millet, guinea corn, and sweet potatoes are cultivated on the upland. These two farming activities indicate the conceptualization of time for the Nupe community as shown in Table 1<sup>1</sup>.

The conceptualization of time as summarized in Table 1 is elaborately discussed in the following sections.

# 3.2. TIME BASED ON SEQUENCE OF FARM ACTIVITIES

The concept of time in Doko community begins with the coming of the first rain which occurs around March every year. As such, the fall of the first rain marks the beginning of the cropping season. Accordingly, the landscape also gives its indicators of time for the beginning of the cropping season as ascribed by respondent R3 in the anecdote below:

"Gbaman zurugi wan ji wun tiya kamina ele ga chin nan, wun me lawu gan zunzun a chaani"

This means that the appearance of a reddish insect after the fall of the first rain gives us an indication that the farming season has begun. Thus, suggesting the first rain and the appearance of the reddish insect affirm the time for the beginning of the cropping season. While, the pens for domestic animals are prepared and those that needed reconstruction are quickly fixed. The reason for this seasonal routine was explained by a respondent anecdote as follows:

"Our domestic animals are allowed to roam freely during the dry season, but when the rains come, we confine them"

Mostly, the free-range animals are caged in the second month of rainfall when the crops begin to sprout. As such landscapes become transformed through the disappearance of domestic animals from the environment to allow for the sprouting of crops such as millet, bulrush millet, and groundnut. Similarly, this period also provides some additional vegetative landscape indicators as fruits of locust beans and mango trees mature for harvest. In addition, the second month sees the appearance of *kparo;* partridge bird. The time for the appearance of the *Partridge* bird is tied to the maturity of the bulrush millet. It is a common knowledge within the cultural landscape of the Nupe community that the time for the appearance of the partridge bird occurs 5 weeks after the bulrush millet have been planted. This is explained in the anecdote by one of the respondents:

"The birds are attracted to bulrush millet, it is the first crop of the season, it matures fast within 5 weeks and by the sixth week it is harvested"

What is to be noted in these transactions is that there exists a sequential timing for activities such as the appearance of the partridge bird which occurs in the fifth week of the cropping season. The appearance of the bird signifies a time indicator for the harvest of the first crop of the season. Thereafter the harvest of the bulrush millet in the sixth week of the cropping season is the appearance of mani-mani (greenish yellowish maggot) which feeds on the leaves of butryspernum parkii (Shea nut tree). This period marks the time for the collection of these maggots by the women folk in the community. The maggot is used for the preparation of a local delicacy. Concurrently, during this period the men begin to plant the second sets of crops which include melon, sweet potatoes, and cassava. The fifth month marks the fruiting of the Shea nut tree. The fruiting of the Shea nut tree marks the time for the women folk to go to the field for the picking of Shea nut fruits. The nuts of the Shea butter tree are used for the production of vegetable oil called *mikote*. Furthermore, the fifth and sixth month is the period for the planting of beans and the harvest of melon respectively. However, the complete processing of the melon seeds which involves washing has to wait for the floods to come first. It, therefore, means that even though, the melon matures early, the time for its washing and washing depends on the appearance of the floods.

<sup>&</sup>lt;sup>1</sup> The Table is an output of a PhD research conducted in 2015 by one of the Authors and thus also found in an unpublished thesis (I. B. Muhammad, Department of Architecture Doctor of Philosophy, (**2015**))

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Thereafter, the seventh month is the period for the harvest of corn while the drying of the floodplains provides an opportunity for the harvested rice to get dried on the fields. Immediately after this, is the period for the harvest of cassava, groundnut and guinea corn in the eighth and ninth month. Monkeys are also seen within this period foraging on the matured grains and tubers at the farms. The appearance of monkeys and other rodents in this period is a general phenomenon because crops are more prone to damage at their booting stage <sup>31</sup>. The landscape begins to become dry on the tenth months while the beans get harvested. Also, the tenth month is the time for the appearance of cattle herds together with the cattle egret (Bubulcus ibis) into the landscape. The animals forage on the remains of farm products while the domesticated animals, the sheep, and goats are freed in the eleventh and twelfth month until the next season's crop begin to sprout. The narrative above showcases transactions within a cultural landscape tied to series of interwoven activities of highland and floodplain farming activities.

# 3.3 SURMISING THE CONCEPT OF TIME IN NUPE COMMUNITY

The time for the cultivation on the floodplains in the community is determined by the level of flood. As such the coming of the first rain does not neccessarily determine the time for the start of the planting activities on the flood plain, rather the natives read from the landscape to determine the appropriate time to cultivate. This is similar to what is found being practiced in Okavango Delta Botswana<sup>10</sup>.

Contrastingly, while the time for the cultural transactions with the flood plains depends on the level of the flood, the highland transactions commences right from the fall of the first rain. As such the prediction of future activities is premised on the performance of an activity first before another activity can take place. Such sequential transaction is exemplified in the washing of the melon seed, a highland crop which requires that the flood comes first before the task of washing is conducted. Similarly, the bulrush millet needs to mature first before it paves way for other crops to be planted.

Again, the sequential timing of activities also shows the disappearance of domestic animals from the landscape to confinement during the cropping period. Similarly, the Fulani herdsmen leave the scene for the farmers to cultivate their crops. As such the time for the cultivation of crops has to be completed first before the cattle are seen again within the immediate vicinity of the community. These showcase a cultural conceptualization of time as well as understanding between the local farmers and the cattle herders. This cultural understanding thus contributes to the limited number of conflicts between the cattle herders and the farmers when compared to other communities within and outside Nigeria as highlighted by several scholars<sup>32-34</sup>. The concept of this peaceful coexistence is further highlighted by a residence of the community in the following anecdote:

#### "We don't leave our rice too long on the farm because it does not take too long before the Fulanis come with their cattle"

From the narration above, there exists a period of time for which the matured crop is harvested so as to allow the fields for the cattle. Accordingly, this cultural conceptualization of time provides social and ecological benefits to the farmers and the cattle herders<sup>8</sup>. This is because, the fields provide crop residues for fodder, while the cattle enrich the soil with their dung. As such the understanding of time conceptualization has enabled a sustainable symbiotic relationship between the cattle herders and the native farmers

### 4. CONCLUSION

Time conceptualization cannot be a predetermined script for all cultures <sup>11</sup>. This notion can be applied to the outcome of the analysis presented in this paper. The concept of time is socially shaped by the indigenous people's cultural transactions which in this case is the farming activities. It also showcases a divergence from the general norm of clock time to time conceptualized on the sequence of activities in which an activity has to take place first before another activity can take place. Similarly, the conceptualization of time by the indigenous people is a function of the landscape character and its indicators which are constituted in both vegetative as well as animate form. More also is that indigenous conceptualization of time is culturally developed and tied to the main economic activity of the community.

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Fig. 1a: A closeup view of Doko Community hill

Fig. 1b. A view of Doko Community from the hill

<b>Table 1:</b> Doko Nupe Community Farming Calendar and Landscape Indicators
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Native calendar	Months	Activities	Landscape indicator
Month One	March	Preparation of yam plots and sowing of bulrush	Appearance of <i>gbama</i> (reddish insect)
Month Two	April	The period for Sowing of millet, groundnut, and harvest of bulrush millet	-Locust bean trees start to fruit-Mango trees begin to fruit ' -The appearance of kparogi bird Caging of goats and sheep
Month Three	May	The period for Planting of sweet potatoes, melon, and cassava	-Appearance of mani mani greenish -yellowish maggot
Month Four	June	The time for harvesting of the first yam	The Shea butter tree begins to fruits
Month Five	July	The time for planting of beans	Floodplains begin to get flooded
Month Six	August	The period for the harvest of Sweet potatoes melon	Most flood plains get flooded
Month Seven	September	The time for Harvest of maize	Some floodplain begins to dry,
Month Eight	October	Time for the Second Harvest of yam and cassava	Appearance of monkeys in the landscape
Month Nine	November	Harvesting of Groundnut and Guinea Corn	Disappearance of monkeys from the landscape
10th Month	December	Harvest of Beans takes place at this period	Appearance of cattle herds and Cattle Egret ( <i>Bubulcus ibis</i> ) white bird on the landscape
Month 11	January	Clearing of farms begins	The Landscape becomes dry and dusty while goats and sheep are released on free range
Month 12	February	Clearing farm plots continue and preparation for the nest farming begins	The landscape becomes dry and dusty

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