



The Ritual Music, Culture and Nature of the Chiswa harvesting among Babukusu of Western Kenya

Mukasa Situma Wafula

The Technical University of Kenya

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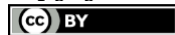
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Abstract

Termite harvesting remains an important ritual and cultural activity in the Bukusu community of Western Kenya. Termites are a delicacy that people enjoy. Harvesting the termites takes different approaches as will be discussed in this article. The paper will, however, focus on one mode that makes use of a musical stimulus to attract the termites into a trap. In this article, I will venture into showing how this ritual of termite harvesting is an important part of the intangible cultural heritage of Babukusu. Further, I will seek to demonstrate how music can be central to interspecies communication. It is also envisaged that this article will contribute to the literature concerning ecomusicology, a new field of study that is in the process of developing definitions and terminology as well as conceptual understanding. This article drew data from field research I carried out in Bungoma County in 2017. Using ethnographic approaches, I interviewed participants during the harvesting rituals. Further data was gathered through participant observation. It is important to note that I come from this community and have over time participated in the ritual. Some of the information in this document is based on my position as an insider who has participated in this ritual over the years.

Introduction

This article seeks to contribute to a new area of ecomusicology, drawing data from the termite harvesting ritual with a focus on the music employed, and how culture is manifested with a natural environment. In the first part of this paper, the introduction will endeavor to present literature on ecomusicology, and a bit on the termite harvesting among Babukusu (the Bukusu people). In the next part I will present data that was gathered from the field under the subtopics 'locating *khukhupaka chiswa*' and 'dramaturgy'. In the subsequent section, discussion, I delve into demonstrating how music, culture and nature are manifested in the termite harvesting ritual, based on the data that was presented in the two preceding sections. This article recognizes the fact that minimal literature has been written about this ritual, the musical part notwithstanding. That is why the first section will draw



some literature concerning ecomusicology, another area that is still being researched. Furthermore, the section will also avail the scantily available pieces on the termite ritual, whereas a bigger part of the article will profit from primary data from. To support that presentation of data, the author illustrated diagrams based on field observations and descriptions by the research participants.

I choose to write about this area to celebrate Tiago de Oliveira Pinto my Professor of transcultural musicology with vast experience in the Afro-Brazilian music of the Reconcavo Baiano, Brazil. Besides his knowledge in this music, Tiago is deeply passionate about music in non-humans, especially birds, an area that he has researched and widely published on. His passion for this research area was most evident during our fieldwork in Bahia, February 2017, where most of his time was devoted to understanding bird music by recording them sing and interviewing the people who keep them. In addition, he has in many instances been interested and requested me to sing bird songs and explain how the Bukusu community regards such. On his 65th birthday, I chose to focus on music in humans and how it relates to non-humans (*chiswa*) as an appreciation of what Tiago has stood for over the years.

The study of music as culture and in culture concerning nature and the environment may fall under ecomusicology, a relatively new field that is in the process of, among other things, conceptual development (Watkins, 2011). The lack of a clear definition is based on the many questions raised regarding the place of music/musicology in nature and vice versa. Allen (2011, pg. 392), for instance, is concerned as to whether musicology is part of the problem or part of the solution, the role musicology plays in the welfare and survival of humanity; or how nature informs music, and what can study of music can tell us about humans, other species, the built environment, the natural world, constructed “nature,” and their connections. Additionally, what is the place of musicology in adapting to a better life on earth, or does it sometimes estrange us from life? Importantly, whether the field contributes more to our survival than to our extinction, and whether the environmental crisis is relevant to music – and more importantly, whether musicology can solve it.

In this article, I embrace the Grove dictionary definition of ecomusicology as the relationships of music, culture, and nature. That is, the study of musical and sonic issues, both textual and performative, as they relate to ecology and the environment (Allen, 2013). One such instance that brings together music, culture and nature is the termites (*Chiswa*) harvesting ritual among the Babukusu, a Bantu-speaking people of Western Kenya. A particular species, *Chiswa* harvesting, involves playing *Kumwanjo* (a wooden rattle) accompanied by work songs. It involves the use of musical stimuli to motivate the movement of termites. The existence of termites is a result of nature, which is in many ways influenced by environmental factors weather patterns, and human activities. The harvesting ritual is thus a cultural activity which is musical yet supported by natural occurrences. A crucial issue, then, is the place of termites in the Bukusu community.

According to Khaoya (2013), *Chiswa* is a delicacy among the Babukusu of Western Kenya. They are harvested during both the wet and dry seasons. Based on indigenous knowledge systems concerning weather patterns, Babukusu know when the termites are mature for harvesting. In one circumstance, during the wet season, long rains motivate the termites to leave their underground dwellings. In contrast, during dry and short-rain seasons, a musical stimulus motivates the termites to come out of their dugouts. For the latter, *Kumwanjo*, a wooden rattle, is played (to be expounded on in the section on dramaturgy), accompanied by work songs specific to the ritual. It is considered a ritual because it



is an occurrence with a specific action performed in a particular order governed by given rules. The music accompanying the ritual stimulates the termites and produces a characteristic soundscape that gives a unique character to the ecosystem. Although primarily an ecological phenomenon, the Babukusu have negotiated a cultural dimension in music and ritual to interact with termites instead of the naturally occurring rainfall. According to Nasimiya (1984), the current alteration of climatic patterns experienced in Kenya is a challenge to the sustainability of Chiswa harvesting and the survival of the music accompanying the ritual. Observation shows that as the *Chiswa* harvesting institution dwindles due to the abovementioned reasons, so do the music and ritualistic processes related to the activity.

This paper will focus on presenting this intangible cultural heritage through ethnographic approaches. It will document the musical character of this activity by analysing the *Kumwanjo*, its rhythmic configuration, the accompanying songs, and the role they play in Chiswa harvesting. Additionally, the paper will attempt to determine those features in *Kumwanjo* that could, be responsible for the communication between humans and termites. This article will contribute to preserving endangered cultural practices and heritage by registering the *Chiswa* festivity and harvesting ritual of the Bukusu community of Western Kenya. The transcription of the songs will not only preserve them due to their dwindling use but will also make them available for alternate and further usage. The songs will be made available in a notated format, in addition to their existence in people's memory, which is typical of the oral nature of most African traditions. The lack of a custodian of such oral knowledge means the absence of information. Fundamentally, the goal is to contribute to the literature, concepts, and research approaches in the new field of ecomusicology.

To understand the ecomusicological nature of this ritual, this article will first locate the *Kumwanjo* in *Chiswa* harvesting and its dramaturgy, then focus on the activity's cultural, musical, and natural aspects.

Locating *Khukhupaka Chiswa*

To supplement agricultural products, Babukusu traditionally hunt and gather wild sources for food. Despite the diminishing wild sources, *Chiswa* remains an important delicacy for the Bukusu and the larger Luhya community of Western Kenya. Nasimiya (1984) acknowledges the special importance of termites and mushrooms, such as *bukochwe*, *buswa*, and *bukusuma*, which women and children mainly gather. Concerning *Chiswa*, they are mainly gathered during the wet seasons and on a smaller scale during the dry seasons. The rains (season), therefore, motivate the movement of termites from their dugouts but can also be indicators of their maturity; hence, the opportune time to be harvested. In addition to rainfall, a musical stimulus can also be employed to motivate the movement of termites. Given the changing rain patterns and when the musical stimulus is employed, the termites are harvested at varied times (of the day or night); therefore, there are assigned names that also characterise the respective seasons.

Khaoya (2013) and accounts from research participants of this study showed that the first type of termites are called *Chiswa Chisisi*, which are harvested during the season when the long rains gradually subsided. Normally, long rains appear in the afternoons (almost daily) and on some occasions, almost all day. Towards the end of the long-rain season, the rains generally appear late in the afternoon on selected days. This end of the season usually ushers in the harvesting of *Chiswa chisisi* that escape from their dugouts in the afternoon, depending on the availability and position of the sun. They are harvested until late afternoon before the rains come down by picking them up one by one or confining them in a dome-shaped trap (*Sibilike*) made from flexible sticks (twigs), and covered with



grass, leaves, clothes, or blankets. This trap will be explained in detail (with a pictorial representation) in the section on the dramaturgy of *Chiswa* harvesting. This type of termite is harvested *en masse*. When the long rains subside, there are chances that more termites (*Chiswa Chisisi*) can be harvested. In this case, *Kumwanjo* is played from early morning (from dawn) until around 8 am or 9 am. The termites will be harvested in the afternoon using a dome-shaped trap made from flexible sticks.

The second type of termites are called *Kamabuli*, which are usually harvested in the evening as the sun goes down (from after 5pm till it is dark). This type of harvest usually lasts only a short period; therefore, it seems like a snack where people pick them and eat them raw right away. Some people, however, put the *Kamabuli* into cups, and dry them over a pan before they are eaten. Related to *Kamabuli*, are a third type of termites referred to as *Kamaresi*. These leave their dugouts in the night, usually during the rainy season. They are harvested by trapping them in a shallow pit, into which they are attracted by a light. When they move towards the light, they slide into the pit via banana leaves that are lined on the sides of the pit.

The fourth type of termites, *Chiswa Chimome*, are harvested during short rains/showers. They mostly appear in areas near the rivers that are characterized by clay soil. A trap made from clay soil is prepared and then the *Kumwanjo* (a wooden rattle) is played, accompanied by singing. Additionally, water is intermittently poured into the termite holes (*kameso*) to enhance their chances of leaving the dugouts. Related to *Chimome*, are a fifth type, called *Chiswa Chindawa*, that are harvested similarly, only that they occur during the dry season (*simiyu*).

From the description of the respective types of termites, harvesting the first three (*Chisisi*, *Kamabuli*, and *Kamaresi*), unlike *Chimome*, *Chindawa* and *Chikhupaka*, have no music involved. This is because they are harvested at times when rainfall is sufficient. The latter three, however, are harvested during short/light or no rains, hence the need for a musical stimulus to influence the movement of the termites. This paper will focus on the latter to demonstrate how music, as a cultural phenomenon, intertwines with termite harvesting, a result of nature, that depicts a social, ecological, and economic phenomenon.

The dramaturgy of *Chiswa* harvesting

Harvesting of this type of *Chiswa* is preceded by identifying a possible spot where their dugouts reside. In most cases, such spots appear in places where the queen termite may reside, anthills also known as *Sirunda* (small ones) and *Liswakhi* (big ones). In some instances, though, such spots may not have visible anthills yet will exhibit termite holes (*Kameso*). The current research established that a place where termite holes appear is called *Siswa*, a name generated from *Chiswa*, to denote where the termites reside. During the day, people search for possible *Siswa* spots from where they can harvest them later. When they are identified, the searcher plucks plant leaves that are placed at the spot. This is an indicator that the spot has been secured. No other person can take it up; otherwise, they risk being bewitched by the owner, or perhaps the termites will not be realised altogether. When identified, such places can be used from one season to another without necessarily looking for a new one. In some instances, the termites migrate from one spot to another, referred to as *Siswa siauya*.

Having identified *Siswa*, the people cut three sizeable sticks. A bigger one (*Kumwanjo*) is placed on the ground, and two smaller ones (*Chikhupakilo*) are held in the hands. In some instances, people may use two sticks (*Chikhupakilo*) in each hand. The hand sticks are hit on the ground one to produce the sound of a rattle that is called *Kumwanjo*. Below is a pictorial representation of *Kumwanjo*.

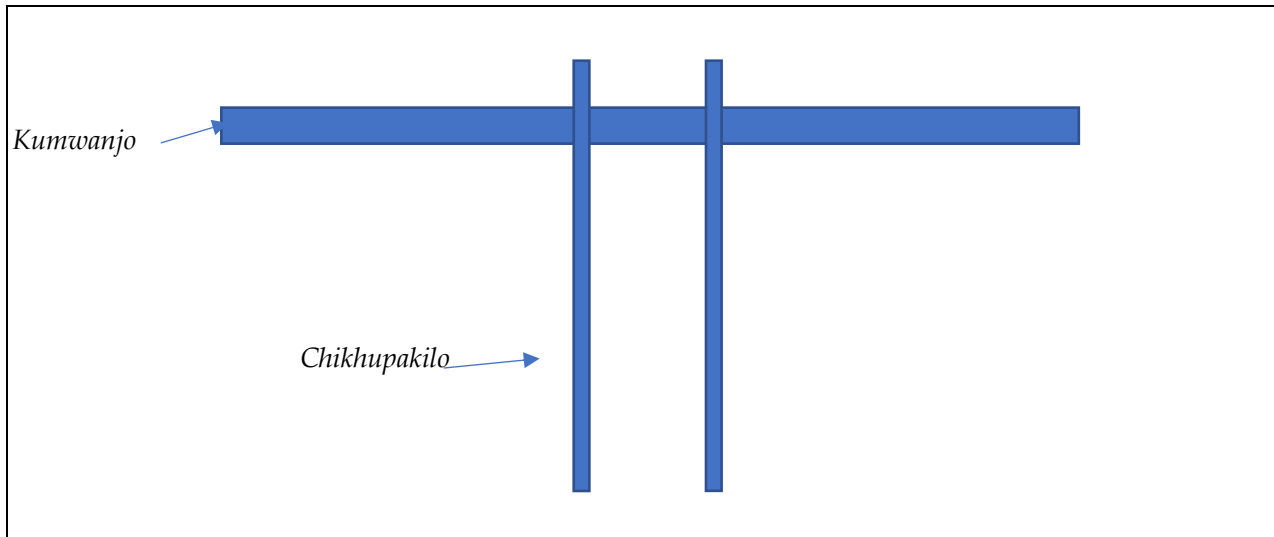


Figure 1: Kumwanjo

The instrument, *Kumwanjo* is unique to *Chiswa* harvesting and, therefore, not employed in any other musical instances. The instrument is played from daybreak for close to three hours. It is not clear the exact time that this musical moment (should) lasts. However, elders always guide the young ones on when to start and stop. It is believed that when not played long enough, the termites will not ‘hear’ *Kumwanjo*. They will say, *Siswa sikhaulila tawe*. But when overdone, they will say the termites have gone deaf (*siaminyalile*). The termites fail to leave their dugouts in such instances (under or overplayed). The consistent playing of the rattle and guidance from elders, therefore, develops one’s knowledge of the harvesting ritual. Knowing when to play the rattle, its duration, and the accompanying rhythms is most important. *Kumwanjo* can be played in various positions depending on the preference and gender of the player. Below are the positions in which the instrument is employed.



Figure 2: Khukhupaka Chiswa – squatting position and standing position.

The figure above demonstrates how *Kumwanjo* is played. One stick (bigger in size) is placed on the ground, and two (smaller ones) are held in the hands and then beaten alternately and together. The player of *Kumwanjo* in this picture is male, hence assuming a squatting position. Besides being masculine his male dress code befits the squatting position to play the instrument.



Figure 3: *Khukhupaka Chiswa* – sitting position (boys)

Like Figure 2, the one above illustrates the playing of *Kumwanjo*, but in this case, at a sitting position for a male player. This research established that male players are at liberty to assume either position. Figure 3 below illustrates the performance position of a female player.



Figure 4: *Khukhupaka Chiswa* - sitting position (girls)

In the figure above, a female player utilizes a sitting position with their legs stretched straight. It was explained that their dress code is one reason for this position. It is also the accepted sitting position for women, as a demonstration of the value system of their gender.

Figures 2, 3 and 4 illustrate the positions in which *Kumwanjo* is played. They are determined by gender, age and convenience of the players. Importantly, the bigger stick that is placed on the ground is firmly fastened to the soil using the legs so that no movement occurs during the playing, and the vibration is felt through the soil. The position notwithstanding, it is crucial that the players know when to stop playing, a point which the termites would have been satisfactorily enticed to leave their dugouts.

When the music ceases, the players go out to look for flex sticks that will be used to make a trap that is dome-shaped, which is usually assembled beginning around noon. According to Babukusu, it is believed that before then, *Siswa* would have received enough sunlight, which enables better *Chiswa* harvesting. When the trap is erected (*khubilika Siswa*), sufficient time is allowed for the ants to gather, before the trap is covered with blankets, grass, leaves or bedsheets. When the number of ants (*Kamake*) is sufficient (with the soldier ones called *Namung'awe*), it is said, *Siswa siachukhile*. On one side of the trap (usually in the direction of the sunlight), which will be the attraction point for the termites. A hole-trap (*Efubo*) is dug at the opening, wet earth smeared round and laced with young banana leaves. The termites would then slide the banana leaves into the trap hole. The banana leaves also keep the termites clean, so they do not come in contact with mud. The termites can then be picked from the hole and placed into a lockable container, so they do not fly away. Below is an illustration of a complete termite trap.



Figure 5: Siswa

Figure 5 is an illustration of *Siswa*, the termite trap. It is made from flex sticks that are then covered by grass, leaves, or currently blankets (as is in figure 5). On the left side, the two sticks with a translucent material show the direction of light. This is the position where the termites are attracted, and the trap hole is situated.

To further attract the termites to the trap, a special shrub called *Lutulika*, which seemingly has a pleasant scent is placed near the hole (*Efubo*). In some instances, *Lutulika* is smoked into the *Siswa*, through *Kameso* – termite holes, for the termites to come out in plentiful numbers (*chisamisia*). This harvesting moment may, at times, be challenged by predators like monitor lizards (*Namukhokhome*), snakes (*chindemu*), or worse, red ants (*Bumelela*) or black ants (*Walunabe*). These may lead to minimal, or no termites being harvested at all. In the instance of the red and black ants, the termites may migrate completely. It is also said that idling and passing wind around the point is a bad omen that can work against the successful harvesting of the termites.

The greatest threat to *Chiswa* is the use of agricultural chemicals that kill the fossils responsible for the generation of the termites (cf. Wanyama, 2007). The total extinction of the termite species due to such harmful agricultural practices would lead to diminished food options for Babukusu. This also, being an economic activity in which the harvested termites are sold to generate income, implies a threat to their livelihoods too. And for the musicologist and the musician, it implies the demise of the music that is an essential part of their intangible cultural heritage. In the ensuing section, I will delve into the ecological (nature), musical, and cultural aspects of the *Chiswa* harvesting ritual.

Music, culture, and nature

Kumwanjo is played both as a solo and ensemble instrument. Fig. 4 shows an instance where solo playing is evident—figures 2 and 3 show ensemble playing, where many players are involved. The ensemble is determined by the availability of willing players who may not necessarily be accomplished musicians (players). This is because apprenticeship plays a major role in the learning process of playing *Kumwanjo* and singing *Chiswa* harvesting songs. Accomplished and novice players, therefore, play together to learn while participating in the music-making venture. The creative process



involved in this is not overly structurally determined but elastic enough to allow for the dynamic firmness of the rhythm. Besides, the elasticity allows for the lead singer to creatively compose within the performance, as others work on the fluency and cohesiveness of the rhythm in the ensemble. The following are dominant rhythms played on *Kumwanjo*, transcribed using the cycle patterns, a system Kubik (1990) advocates for in the transcription of African music.

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------|----|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Player 1 | 12 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | |
| Player 2 | 12 | X | . | X | X | X | . | X | . | X | X | . | . | X | . | X | X | X | . | X | . | X | X | . | . |
| Player 3 | 12 | X | . | X | X | . | X | X | . | X | X | . | X | X | . | X | X | . | X | X | . | X | X | . | X |
| Player 4 | 12 | X | . | X | X | X | X | . | . | . | . | . | X | . | X | X | X | X | X | . | . | . | . | . | . |
| Player 5 | 12 | . | . | X | X | X | X | . | . | X | X | X | X | . | . | X | X | X | X | . | . | X | X | X | X |

Key:

12 – the number of pulses in a cycle

X – to be played

.

Transcription 1: *Kumwanjo* rhythms

From the transcription above, *Kumwanjo* playing is based on the twelve-cycle pattern. When played by one person, the patterns can be varied from one to another. In the case of ensemble playing, respective players can employ the different patterns concurrently but also alter them over time. The respective players' proficiency determines the pattern choice to play. Observation shows that in most cases, the players start with the basic pattern, $\boxed{12} X X X X X X X X X X X X$, as a form of warm-up to the playing. Additionally, this ensures the novices are acquainted with the rhythms, after which the accomplished players move on to more complex ones. From a different perspective, however, this may also be viewed as a musical development, where they start with basic to more complex rhythms. The musical development, again, does not have a single definitive structure but unfolds based on mastery of the rhythms and how the musicians are motivated to play.

Playing *Kumwanjo*, like any other music-making process, never evades evaluation within the performance. It is common for the more accomplished players to instill rhythmic cohesion and parity into the novice in instances where they stray. This is achieved by first using facial expressions and gestures to notify them (novices) of rhythmic distortion. They can also employ speech surrogates to help the learners find their rhythmic bearing. An example of a common speech surrogate is “*tanda kataka tanda kataka tanda kataka*,” which takes a rhythmic form of $X . X X X X . X . X X X X . X . X X X X$. In other instances, the accomplished players retreat to the most basic rhythm as a way of helping the learners find their bearing. That is, $X . . X . . X . . X . .$. This rhythm is achieved while both hands (holding *chikhupakilo*) hit *Kumwanjo* concurrently. Besides the players evaluating each other, elders who often listen from a distance always appraise the music-making process. Using speech surrogates, it is common for them to be heard demonstrating how the rattle should be played. They similarly sing



so that the younger players learn the accompanying songs for the ritual. Importantly, the elders notify players of instances where they could be over or underplaying.

Regarding song texts, the following forms the established textual construct that can be altered from one context to another based on the proficiency of the player and their ability to relate to existing situations.

| Bukusu text | English Translation |
|--|---|
| <i>Mbele ne mbira mbulila'omwanjo kwalila</i> | As I was passing by, I hear <i>Kumwanjo</i> playing |
| <i>Mbele ne mbira mbulila'omwanjo kwalila</i> | As I was passing by, I hear <i>Kumwanjo</i> playing |
| <i>Na khaswa khano khalimo naswa sina</i> | And what termite is in this <i>siswa</i> |
| <i>Na khaswa khano khalimo naswa sina</i> | And what termite is in this <i>siswa</i> |
| <i>Kwa ndala ndala mbilele kongo wa ng'ina</i> | Drop one by one so that I take it the mother |
| <i>Kwa ndala ndala mbilele kongo wa ng'ina</i> | Drop one by one so that I take it the mother |
| <i>Kwa ndala, chibili chibili</i> | fall one by one, two by two |
| <i>Kwa ndala, bumiumiu</i> | fall one; it is slippery |
| <i>Khosikale kane oande khulialilo</i> | if you resist you will remain on the surface |
| <i>Kurusia, kurusia, krrrrrrrrrrrrrr</i> | plenty, plenty |
| <i>Kurusia, kurusia, krrrrrrrrrrrrrr</i> | plenty, plenty |
| <i>Wibulungusia wanaswa wibulungusia</i> | align you feathers align |
| <i>Maayi Cheni kandakile busuma bwa busa</i> | Aunt Jane, promised me free Ugali. |
| <i>Wibulungusia wanaswa wibulungusia</i> | align you feathers align |
| <i>Maayi Cheni kandakile busuma bwa busa</i> | Aunt Jane, promised me free Ugali. |
| <i>Kurusia, kurusia, krrrrrrrrrrrrrr</i> | plenty, plenty |
| <i>Kurusia, kurusia, krrrrrrrrrrrrrr</i> | plenty, plenty |

Transcription 2: Mbele mbira - text



In the song, it is recounted how one was passing by only to hear *Kumwanjo* sounding (being played). This means, it was not their intention to move close to where the *Chiswa* were being harvested. It is the pleasant sound of the rattle that invited them to the place. But one wonders what is in the *Chiswa* that is so attractive. The termites are then encouraged to drop into the trap hole (*Efubo*) one after another without ceasing. The part '*kwa ndala ndala mbilile kongo wa ng'ina*' is a prayer to have a plentiful catch where the termites come out without clutching. When they play as an ensemble, this usually forms the refrain part for all to sing. The part of *kurusia* is an onomatopoeic sound to demonstrate the plentiful catch of the termites dropping one after another into the trap hole.

The melody in transcription 3. below represents the sonic aspect of the song text in transcription 2 above.

Singer $\text{♩} = 150$

Mbe-le ne mbi-ra mbu-li-la'o - mwa-njo kwa-li-la, mbe-le ne mbi-ra mbu-li-la'o-

4

- mwa-njo kwa-li-la. Na kha-swa kha-no kha-li-mo na-swa -si-na, Na kha-swa kha-no kha-li-mo

8

na-swa -si-na. Kwa nda-la nda-la mbi-li-le ko-ngo wa ng'i-na, Kwa nda-la nda-la mbi-li-le

12

ko-ngo wa ng'i-na. Kwa nda-la nda-la mbi-li-le ko-ngo wa ng'i-na, Kwa nda-la nda-la mbi-li-le

16

ko-ngo wa ng'i-na.

Transcript 3: *Mbele mbira* - melody

Transcription 3 above shows the melody of the song "*mbele mbira*" (while I was passing by). The transcription has been done on the Western staff notation with a 12/16-time signature, to correspond to the 12cycle pattern (as shown in transcription 1). The tempo indicated in the transcription demonstrates how fast the song is, and so is the rattle playing. Comparatively, the tempo of this rattle playing is closely related to the rate of raindrops falling. According to Babukusu, whenever the rains



start, they assume a rhythm like what player 1 in transcript one does. They use speech surrogates to imitate the raindrops in an onomatopoeic sound as this; *pata pata pata pata* (pitter-patter). As the rains increase in intensity, such rhythm is consumed into the mass of falling water that produces a 'waaaaaaa'-like sound. But keen listening can still decipher the pitter-patter rhythm, though at an extremely fast tempo.

Apart from the rhythmic relationship between rain drops and *Kumwanjo* playing (described above), another similarity is evident in duration. During the wet season, rains in the Western part of Kenya last almost two hours. In exceptional cases, though, it may last up to three hours. The playing of *Kumwanjo* usually takes almost a similar duration (slightly shorter or longer) as the rainfall. It is also true that during the wet season, the rains fall without any breaks. In instances where they occur, they are so short-lived that the breaks are hardly felt. Commonly, *Kumwanjo* playing is also a continuous process that may occasionally take brief breaks. When the breaks are extended, elders complain that the termites will be 'deaf', hence no harvest. Based on the two activities (rainfall and *Kumwanjo* playing), it can be argued that the consistency at which the earth is vibrated due to the falling rain or *Kumwanjo* playing is responsible for the movement patterns of the termites. It is not clear whether such vibration courses disturbance or motivate the termites. However, it is clear that it causes the termites to move upward from the dugouts. Vibration can thus be regarded as a stimulus to the movement patterns of termites.

Whereas singing is common in the *Chiswa* harvesting theatre, it hardly ever happens without playing *Kumwanjo*. However, on scarce occasions, *Kumwanjo* can be played without singing, a situation that is almost unheard of. It can, therefore, be inferred that playing the rattle is a principal musical activity responsible for the movement patterns of *Chiswa*. Singing can be viewed as an essential complement of the *Chiswa* festival, without which the crucial aesthetic elements of the ritual would be missing. Additionally, while singing may not be as essential in the movement patterns of the termites, it is crucial in this music-making process. The text employed in the song also reveals some facts about the harvesting ritual. It describes how the termites ought to come out. While text rebukes idling, it encourages hard work in society. Interestingly, it discusses some dos and don'ts during the harvesting ritual. Given its expressive nature, singing brings merriment and festivity to the *Chiswa* harvesting ritual. But fundamentally, singing in this ritual takes the important role of acting as an agent of social communication as well as enculturation of members of the community members. As shown before, African music-making is a composite that combines many visual and performing arts. The singing part (and maybe minimal movements) demonstrated in this ritual, therefore, affirms the diverse arts present in the composite nature of the African music-making processes, a position that is supported by Stone (1998).

The termite harvesting season is not peculiar to a single family but happens for the entire community. It is, therefore, common that players of *Kumwanjo* from close neighbourhoods coordinate the rhythms. This is generally done alternately, although in some instances concurrently. It also happens that they might play without regard for what the neighbourhoods are doing. Whether coordinated or not, the playing moment forms a complex theatre of *Kumwanjo* and singing that colours the ecology of this community. The early morning theatre of *Kumwanjo* playing attracts the ear of many people in the community such that its absence is similarly noticeable. This further affirms music's role in bringing the community together and fostering a shared identity. The absence of *Kumwanjo* playing would mean a season without a critical musical component, rendering the ecosystem fragmented and lacking a common grain and identity.

While the music entertains the community with a unique soundscape, it is also a familiar sound to the animal kingdom in this part of the world. Birds such as the sparrows (*Opicho*), eagles (*Kisilili*), and hawks (*Biruchu*) will gather as soon as they hear the sound of *Kumwanjo*. This musical stimulus is usually an indicator that food will be available soon for the birds who prey on the termites that evade the trap-hole and fly away. Besides, *Kumwanjo* playing may have an effect on termites beyond the designated spots, hence the birds, lizards, and in some instances, snakes gather at such undesigned areas to feast on what the music has produced. In essence, playing of *Kumwanjo* then connects and/or manifests an interspecies communication from the underground termites to the humans, and to other terrestrial animals (lizards, frogs and snakes), as well as to the birds in the air. The figure below shows how *Kumwanjo* connects different species, from underground, on the earth, and the air.

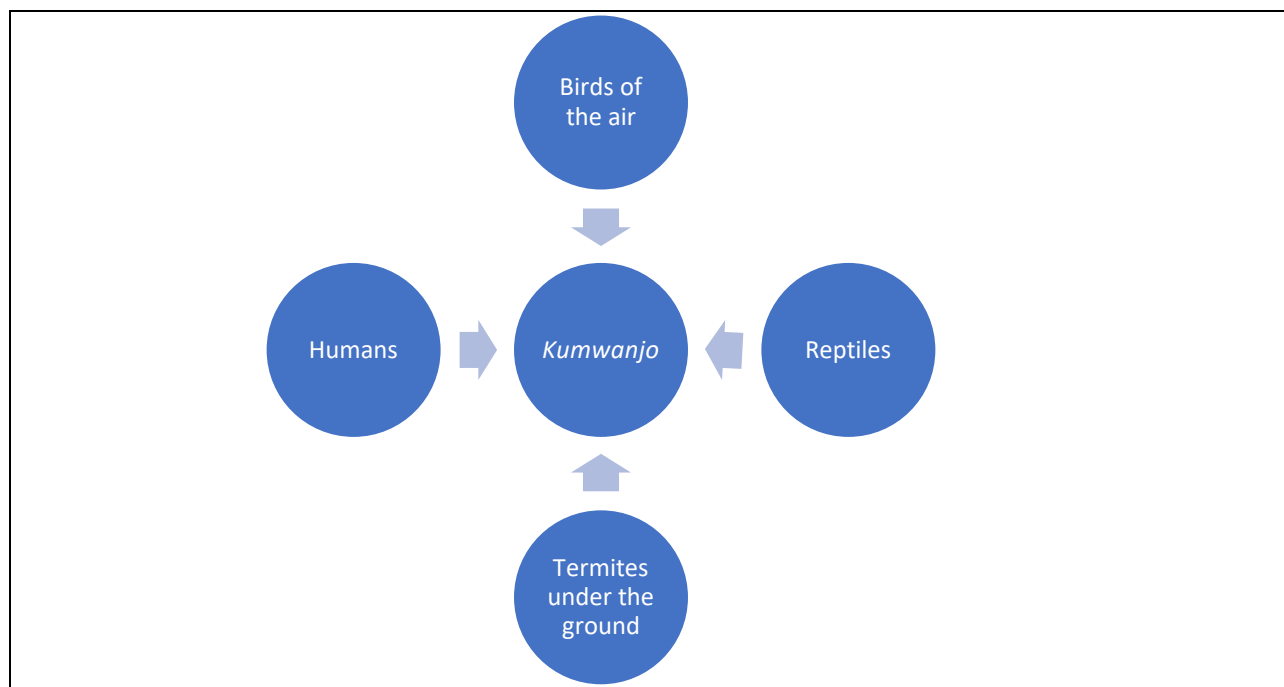


Figure 6: *Kumwanjo* and interspecies communication

According to Fig. 6, *Kumwanjo* attracts species from underground, on the ground and in the air. Usually, the main focus of playing this instrument is to cultivate a stimulus for the termites to leave their dugouts. However, its presence in this ecosystem has made it possible for other species to acquaint themselves with the music, such that when it is played, they automatically get attracted to it. For human beings, the music produced by this instrument forms an integral aesthetic of their environment, which embraces other functions in the community. For the animals (on the ground and in the air), it is not clear whether they are attracted to the musical stimulus of *Kumwanjo*, or it is something that leads them to a possible food source (*Chiswa*). *Kumwanjo* forms the basis for the interspecies communication shown in Figure 6. The interspecies communication leads to a food web of sorts. Whereas the main delicacy of focus is the termites for all the gathered species, it is also common that young boys make traps to catch or shoot down the birds (mainly *Opicho*) that come to feast on the termites. On one hand, humans, therefore, acquire not only termites but also birds that come to feast on the termites. On the other hand, while the lizards and frogs will be focused on preying on the termites, the snakes may not spare them, either. This forms a food web around termite

harvesting, a ritual without which the food for varied species does not exist or may be less accessible. The food web is demonstrated in Figure 7 below.

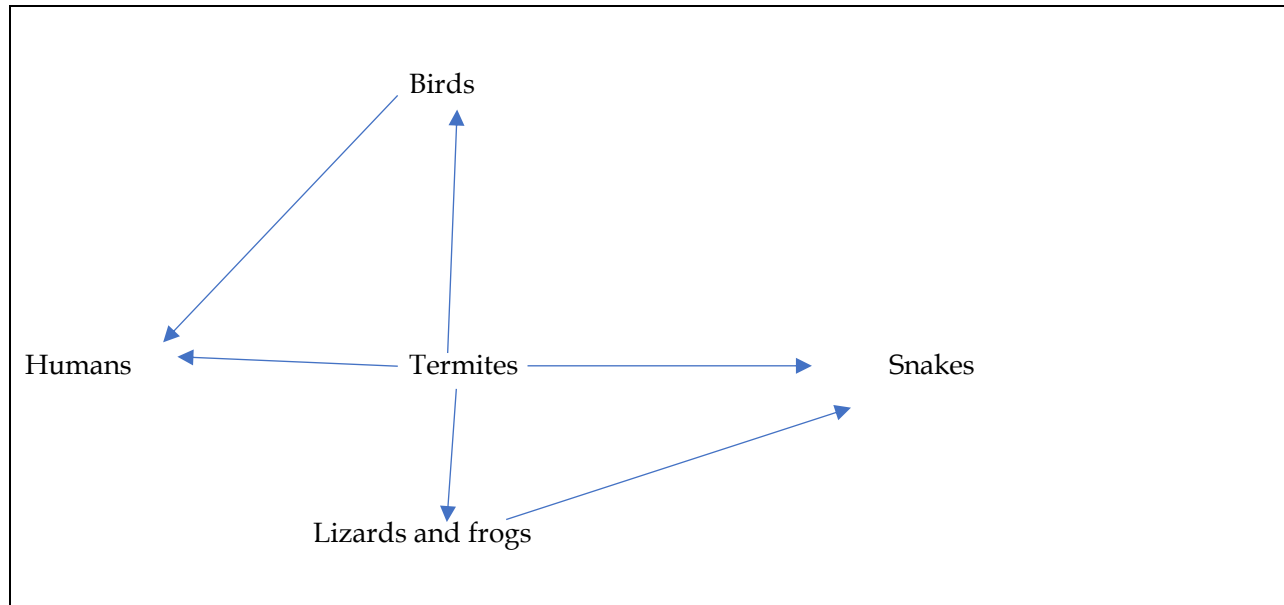


Figure 7: Chiswa food web

Birds such as the sparrow (*Opicho*) are seasonal, appearing during certain seasons, then disappear to other destinations in search of food. The termite harvesting season, therefore, marks a point at which they appear. Besides, the playing of *Kumwanjo* similarly marks the appearance of the birds. It can be argued that the music involved in termite harvesting influences the movement patterns of the birds. Besides, birds and reptiles are known for their hiding tendencies. In this instance, however, the music stimulus influences occurrence and movement patterns as they appear to search for food, their hiding tendencies notwithstanding.

Apart from the musical and ecological issues, several cultural practices are associated with termite harvesting. The entire process is a ritual with stipulated stages, which ought to be keenly observed for the harvest's success. As elaborated in the dramaturgy section, it starts with identification of the *Siswa*, to making of the instrument (*Kumwanjo*), playing of the music over a given duration (with definite rhythmic patterns), erecting (*khubilika*) of the trap (*Sibilike*), waiting for the ants to gather (*Siswa sichukhe*), digging the trap-hole (*khuyaba efubo*), lining the trap hole with banana leaves (*khukhwalilila*) then covering the trap (*khubimba Siswa*). There are consequences for not observing the liturgy of this harvesting process. The most obvious being a poor harvest.

Beliefs and taboos form an integral part of the culture of a people. During *Chiswa* harvesting, substantial beliefs and taboos are also associated with the process. That when the music is underplayed then the termites 'have not heard' the *Kumwanjo*. If it is overplayed, the termites will go 'deaf' and never move in the desired direction for harvest. Apart from the music, it is also noted that once *Siswa* has been identified, one will place fresh leaves at the spot. This indicates that the spot has been secured and no other person can own it, based on the fear of the repercussions, which may be, a total lack of harvest or being bewitched by the initial owner of the spot. During the music-making process, idlers are discouraged from the arena. Whereas it is said that idlers bewitch (*basucha*) the



harvesting process, it can also be seen to discouraging laziness. Interestingly, passing wind near the *Chiswa* musical arena, can lead to a poor harvest! Like many other many cultural systems, there exist remedial measures for eventualities. In *Chiswa* harvesting for instance, smoking *Lutulika* into the trap is a measure taken to enhance the movement of the termites.

Apart from the preceding demonstration of the *Chiswa* harvesting liturgy, it is clear that wide-ranging indigenous knowledge systems are involved in the process. Identification of the harvesting spot is based on knowledge passed on from generation to generation. Understanding the process involved is a result of knowledge gained over time too. This ritual is characterised by terminologies unique to the process that give meaning to the entire activity. Interestingly, these people have ways of guiding the termites in the desired direction and trapping them in a hole while keeping them clean from mud. This is determined by how they identify the direction of the sunshine and erect the trap based on the sun's movement, which determines the light that attracts the termites to the trap hole at the opening. The duration of playing the termite harvesting work songs is the knowledge that is not written anywhere. It is, however, clear that they understand when the music begins and ends, and when it has been under or overplayed. Organising the ensemble is not based on a musical activity that demands accomplished musicians, but rather willing learners initiated into the music-making process during the performance. The learning process within the performance takes notable pedagogical approaches that are unique knowledge systems of these people. This is an example of the knowledge systems associated with termite harvesting, which are essential for the continuity of any cultural system.

Culture is rarely static. As time changes, so do the cultural practices of the people involved. *Chiswa* harvesting has experienced changes over time. Initially, the flex sticks that make the trap were fastened using either dry banana fibre, sisal fibre, or tree barks. As times change, people use industrially produced materials such as plastic strings. It was also a norm for grass or leaves to cover the trap. Today, they use blankets, bedsheets, or even tent covers. The hole traps were formerly lined with banana leaves. Currently, plastic pots, jugs, and other containers are used to avoid the necessity of smearing the holes with mud and then lining them with banana leaves. The material culture involved in the process of *Chiswa* harvesting has, therefore, changed with time and is an indicator of how Babukusu respond to changing times. The dynamism of the *Chiswa* harvesting ritual further shows what an important activity this continues to be to the Bukusu community. Clearly, the community still regards termites as a delicacy and the accompanying music as an important part of their heritage. The entire ritual is an institution that fosters enculturation and upholds this community's norms and virtues.

Epilogue

This article has attempted to bring to the fore the importance of other disciplines in the further understanding musicology. In this instance, music, culture, and nature have provided a measure of optimism for the diversification of the field of musicology, in this case, ecomusicology. The analysis of the *Chiswa* harvesting ritual has brought the following issues to light that are a worthy contribution to the essence of the field of ecomusicology. First, developing a musical universe of a people does not exist in a vacuum but draws from their environmental factors. This was demonstrated in the way Babukusu have negotiated a musical theatre based on how the rains in their ecosystem occur. Whereas the naturally occurring rainfall is responsible for determining the maturity of the termites and their movement patterns, the musical theatre has been developed to enhance and mitigate the lack of such rains for the same results.



Second, music making is a fundamental institution for empowerment of a community. As was shown in the *Chiswa* harvesting, laziness is a vice that participants in the ritual despise. Working together for a common course is instead advocated. Playing *Kumwanjo* was found to be a music-making activity, yet instilled continuity through enculturation of the younger generation. Another important lesson is environmental protection, as demonstrated in the use of branches, twigs, and leaves as opposed to a complete cutting down of trees. The ritual, in this case, provides an environment within which multiple musical, ecological, and cultural facets were not only brought to the fore but also provided viable lessons for the community.

Third, the interdependency of species in the universe can never be eliminated. Music-making in the termite harvesting process provided a unique stimulus that fosters interspecies communication, eventually enhancing the local food web as a form of interdependency. Interestingly, this happens among species from underground to those on the ground and in the air. Such interdependency then accounts for the balance of an ecosystem, the survival of the varied species, and the ecosystem's continuity. Crucial to this occurrence is the music-making process that characterises the ritual, theatre and festivity that comes with the *Chiswa* harvesting.

Based on the revelations of this article, ecomusicology, in many ways, helps bring about an improved understanding of our environment. It creates a link between music and other facets of our culture and the environment in which we live. Through musical activities that cut across cultural and environmental issues, communities are educated on far-reaching disciplines that foster societal stability and continuity. Such research, in a way, positions musicology to contribute to the welfare and survival of humanity and other species. This article has shown that nature informs music-making, a process that tells us about humans, other species, and our ecosystem in our local environments.

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