THE ENDARA XYLOPHONE OF BUKONJO

by

GERHARD KUBIK

In "Tribal Crafts of Uganda", K. P. Wachsmann reports on a xylophone of the Bakonjo⁴, called Endara which consists of 16 to 18 keys played by five men each of them having "a plain stick in his hand". Already, by 1951 and even before, the Endara was "very rare" according to Wachsmann.

So we must consider ourselves very lucky indeed to have found the xylophone of Bukonjo in at least three different places in the area around Bwera, although we never saw a complete set played. The first place we went to was some miles away from Bwera right in the mountains. When the people heard that we were interested in hearing this music, they were anxious to "build up" a xylophone of 14 keys on the spot. Very soon, however, we learned that the logs had been cut by small boys as a part of their play and they were no longer properly tuned. The boys used to place the untuned logs on the banana stems in a rising and falling sequence, which we never found again.

At the second place, also near Bwera, we were successful. There we met an old man with two boys about ten or twelve years old playing a xylophone of ten keys.

Description of the Endara of Bukonjo

The log xylophone commonly known in Bukonjo as Endara (the first syllable is high and stressed) seems, according to African informants, to be constructed in the same way all over the region. The three instruments we saw were very much like the Amadinda of Buganda: a base of two fresh banana stems into which a series of sticks are pressed with the wooden logs or "keys" placed between them.⁴ One difference between the xylophone of the Baganda and that of the Bakonjo was that the Endara logs were much bigger and heavier and, perhaps because of this, not attached by cords to the nearest sticks. Even when striking them hard they did not move out of their positions. Another difference was the number of keys, which according to all our African informants has to be 14 for the Endara while the Amadinda of Buganda has 12 keys and the Akadinda usually 22.

We soon observed how much Bakonjo music is connected with Bakonjo religion; this holds true also for their xylophone music. Its religious background may be one reason for its rapid disappearance nowadays. By comparison the traditional music of Busoga and Buganda (in the prosperous and much more westernized lake provinces) is still played by a few people at least. But Amadinda music as an example from that region is much more "'l'art pour l'art" and although there are religious links⁵, it is a court music and its social, historical and spiritual background is the Kabaka's palace. Therefore, the fact that its most important living performer, Evaristo Muyinda, is a Catholic does not harm the music.

The old man with his two boys from Bwera told us he had obtained his Endara xylophone on the advice of an Omutahwa (a native doctor and diviner). The Omutahwa had said to him that the spirits of the dead, the Abalimu, recommended that "a xylophone

---

² The Bakonjo, a small farming Bantu tribe, live on the slopes of the Rwenzori massif both on the Uganda and the Congo side. Until recently they had many musical instruments and a distinct way of playing them.
³ The short research trip into Bukonjo was carried out in May, 1962, together with Mr. Gerald Moore, the Director of the Extra-Mural Department of Makerere University College, Kampala. Here I would like to thank him for his invitation to accompany him on a lecture tour in the Western Province of Uganda. In our spare time we went to visit some Bakonjo villages in the mountains and made recordings of the Endara xylophone.
⁴ Wachsmann describes an instrument where "the banana stems were supported, close to their ends, by short stumps of banana trunk notched to receive them" (in "Tribal Crafts of Uganda" page 318).
⁵ Wachsmann writes in "Tribal Crafts of Uganda" on the Akadinda: "At its first performance or sometimes previous to an important function, the instrument is submitted to a ceremony, part of which consists of the sacrifice of a cock or a goat and some beer. The blood of the animal and a mouthful of the liquid are splashed over the slabs...".
should always be in the house”. After the talk with the diviner the old man walked into the Congo to Emuramba, a small village near the Uganda border, where, as he was told, a xylophone maker was working. He had, however, nothing of sufficient worth to buy a whole set of keys, so he bought 10 logs only for a goat, the remaining four big ones (keys No. XI - XIV) he explained, he would buy at a later time.

The old man continued saying that the keys for the Endara must be made of the wood of a special tree called Omuhangulu, which could be found on the other side of the mountain in the Congo. But the logs could only be cut by a “special person” and only after a hen or a goat had been sacrificed.

After having played many compositions for us until late in the night, he agreed to give us some information on the music as well, if we gave him money. This money was not to increase his personal income, he asserted, but should be considered as a sacrifice for the Abalimu. He advised us to put the coins under the xylophone keys to assure that not he but the Abalimu would come and take it.

The musical information by the old man

Music for Endara is not usually for this instrument alone. There should be singing to it and dancing with foot-bells (esyonzenda). Then three drums have to be used, one of which is called Engoma enene ey’okwandara (the big drum of the Endara), and Ebitsetse (rattles). The Endara should always have 14 keys and there should be seven people playing it. The seven performers are called Abawathi. (Compare the term Abawuzi in Luganda for the players of the Akidinda). Five musicians sit on one side of the Endara and two opposite them. The five on the one side (with the smallest keys on the left) are:

(From top keys to bottom keys)

I Ow’obwaana (of the biggest of the children)
II Ow’obwaana (of the biggest of the children)
III Enzobooli (the one who speaks)
IV Mutangi (—name of a clan)
V Omusyakulu (old man)

The two on the other side are called:

VI Omukekulu (old woman)
VII Ow’eneene (one who drums the biggest)

There are not only names for each of the seven performers but also for each of the 14 keys. These names according to the old man are (from the smallest to the biggest key):

I Akaana — A child
II Akandi’kaana — Another child
III N’akandi’kaana — And another child
IV Enzobooli — One who speaks
V Omukekulu — Old woman
VI Omusyakulu — Old man
VII Enzobooli eyakabiri — The second one who speaks
VIII Omukakulu ovakabiri — The second old man
IX Omukakulu ovakabiri — The second old woman
X Ekkikekulu — (The fat old woman)
XI Ngakangle — (Dried)
XII Mabula — a name
XIII Mutangi — name of a clan
XIV Nszebe — Rhythm pattern

A basic rhythm is played on key No. XIV Nszebe with two sticks only.

The second place we visited on another day was a small village called Gisavo, near Karambi, right on the Congo border. There, again, we found only one grown-up man
playing the Endara, and there were two boys who played with him. His xylophone also was incomplete, having 11 keys — three, he said, were missing. His name was Petero Kivinga and he was about 40 years’ old, a person quite different from the old man who was very quiet and seemed to live entirely in his tribe’s spiritual traditions. Petero belonged to another, more materially minded, generation, and enjoyed telling us about his many shops on both sides of the border which did good business. He spoke both French and English and proudly stated that he knew “many things”, even how to play the xylophone. About his music he did not like to say much, but he played it and could repeat the same pattern again whenever we wanted. Therefore we made a number of analytical recordings here, asking the three musicians to play each part alone and then together. During the afternoon we were there, Mr. Kivinga taught me a few passages on the Endara.

From this I soon understood how different this music was from the Amadinda music of Buganda and the Embaire music of Busoga, which I had studied two years before. And not only in the tone system but also in the rhythm, melody, and in the whole organisation of the music. Bakonjo xylophone music seems to be strongly linked with xylophone playing in the Congo.

Buganda’s and Busoga’s xylophone music is a system of music unique in East Africa, reminiscent somehow, in its striking “intellectualism”, of the deep metaphysical experiments with Canon, Cancrizans, Inversion and Mirror of the polyphonic European composers towards the end of the Middle Ages. The compositions of Kiganda xylophone music reflect something like research into the structure of the (inner) universe, if I may express myself in this way. Bakonjo xylophone music on the other hand as we heard it is more “earthy”, less “abstract” in its spiritual contents — it is a fascinating and entertaining play of rhythm, melody and harmony, and it is partly improvised. The rhythmic constructions as used in Bakonjo xylophone music seem to be mostly on the lines of cross rhythm and polymeter. The phenomenon of inherent rhythms which I have described elsewhere seems not to be so important here although definitely present.

Let us get an idea of rhythm as employed in Bakonjo xylophone music by a short transcription which I made there on the spot, after my hands had gone through the phrases several times.

The basic rhythm of the composition “Loan” (Fig. 1) played on keys No. VIII, IX and X is a 6/8 pattern repeated throughout the tune. Against this rhythm (which develops strictly in triplets), Musician A adds a more complicated rhythm, which develops approximately in duplets, but is in itself really an additive pattern. The total form of this rhythm is in time units: $3/16 + 3/16 + 2/8 + 2/8 + 2/8 + 2/8 + 2/8 = 12/8$. 

**EXTRACT FROM THE COMPOSITION “LOAN”**

![Fig. 1](image-url)

The Endara Xylophone

---

* Key No. XI had a crack and could not be used in the recording of the scale.
* A note on the transcriptions: Fig. 1 gives the exact image as it is played. The staves do not represent notes of the European tone system. Each line stands for a xylophone key. — The letters above or under the notes indicate the way of performance. * means right hand, / left hand.
Out of the combination of these two cross rhythms no inherent rhythms emerge. The reason is that they are played on different ranges of the xylophone. None of the notes played by either musician are near enough in their pitch to be associated in the listener's mind to form an inherent rhythm pattern.

However, there are inherent rhythms emerging from the part of the second player alone. (*Musician A* in Fig. I). This part is constructed by the unknown composer in a way to make the listener perceive a conflict of two rhythms. Those notes of the second part falling on Key I are themselves arranged in a definite rhythmic group forming a "pattern"; and also those notes falling on Keys II, III, IV and V are arranged in a way to give another "pattern". The human ear — like the eyes which do not perceive isolated particles but always a "gestalt" — perceive two "gestalten" here, a conflict of two inherent rhythms which are the following:

![Diagram of xylophone keys with notes](image)

*Fig. II*

The scales of the two recorded Endara xylophones:

During a visit to the I.L.A.M. in August, 1962, I had the opportunity of using the library's set of tuning forks to measure the pitches of the recorded xylophone scales. The result was strange and I do not exclude the possibility that some of the xylophone keys were considerably out of tune. There are also no pure octaves! It is, however, striking, that three notes were the same on both xylophones, which had been made at different places by different persons. They were not only the same in their intervals but in their absolute pitch as well. We have, therefore, arranged the following disposition in a way that comparison is easily possible:

<table>
<thead>
<tr>
<th>Key No.</th>
<th>V.p.s.</th>
<th>Cts.</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>532</td>
<td>100  1080</td>
</tr>
<tr>
<td>II</td>
<td>502</td>
<td>136  980</td>
</tr>
<tr>
<td>III</td>
<td>464</td>
<td>148  844</td>
</tr>
<tr>
<td>IV</td>
<td>426</td>
<td>148  696</td>
</tr>
<tr>
<td>V</td>
<td>391</td>
<td>124  548</td>
</tr>
<tr>
<td>VI</td>
<td>364</td>
<td>170  424</td>
</tr>
<tr>
<td>VII</td>
<td>330</td>
<td>254  254</td>
</tr>
<tr>
<td>VIII</td>
<td>285</td>
<td>000  000</td>
</tr>
<tr>
<td>IX</td>
<td>285</td>
<td>000  000</td>
</tr>
<tr>
<td>X</td>
<td>285</td>
<td>000  000</td>
</tr>
<tr>
<td>XI</td>
<td>1080</td>
<td>980  696</td>
</tr>
</tbody>
</table>

*Fig. III*

*The Endara of the Old Man*  

<table>
<thead>
<tr>
<th>Key No.</th>
<th>V.p.s.</th>
<th>Cts.</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>622</td>
<td>176  1425</td>
</tr>
<tr>
<td>II</td>
<td>562</td>
<td>251  1249</td>
</tr>
<tr>
<td>III</td>
<td>486</td>
<td>80   998</td>
</tr>
<tr>
<td>IV</td>
<td>464</td>
<td>148  918</td>
</tr>
<tr>
<td>V</td>
<td>426</td>
<td>148  770</td>
</tr>
<tr>
<td>VI</td>
<td>391</td>
<td>158  622</td>
</tr>
<tr>
<td>VII</td>
<td>357</td>
<td>152  464</td>
</tr>
<tr>
<td>VIII</td>
<td>327</td>
<td>149  312</td>
</tr>
<tr>
<td>IX</td>
<td>300</td>
<td>163  163</td>
</tr>
<tr>
<td>X</td>
<td>273</td>
<td></td>
</tr>
<tr>
<td>XI</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*The Endara of P. Kivinga*  

<table>
<thead>
<tr>
<th>Key No.</th>
<th>V.p.s.</th>
<th>Cts.</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>622</td>
<td>176  1425</td>
</tr>
<tr>
<td>II</td>
<td>562</td>
<td>251  1249</td>
</tr>
<tr>
<td>III</td>
<td>486</td>
<td>80   998</td>
</tr>
<tr>
<td>IV</td>
<td>464</td>
<td>148  918</td>
</tr>
<tr>
<td>V</td>
<td>426</td>
<td>148  770</td>
</tr>
<tr>
<td>VI</td>
<td>391</td>
<td>158  622</td>
</tr>
<tr>
<td>VII</td>
<td>357</td>
<td>152  464</td>
</tr>
<tr>
<td>VIII</td>
<td>327</td>
<td>149  312</td>
</tr>
<tr>
<td>IX</td>
<td>300</td>
<td>163  163</td>
</tr>
<tr>
<td>X</td>
<td>273</td>
<td></td>
</tr>
<tr>
<td>XI</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Fig. III*

---

8 The recordings of both music and scales of the *Endara* xylophone are now stored in the Phonographic Archive of the Academy of Science, Vienna, to the Director of which, Herrn Univ.-Doz. Dr. Walter Graj, I am most grateful for continuous support with recording equipment.

10 The *Endara* of P. Kivinga may as well have been an equidistant heptatonic scale. If Key No. III would be sharpened a semi-tone, the lower octave at least would be almost equidistant heptatonic. Wachsmann observed more than ten years ago, that on the *Endara* "the keys separate a pair tuned — approximately — (1) to the interval of an octave." This statement eventually supports our last view.
It is not easy to find out which key in either of the two xylophones is regarded as the tonic. I would guess it is Key No. X on the Endara of P. Kivinga. Certainly this is not proved by anything; and, even if it were the tonic it could be so much out of tune that, relating all other notes to 273 V.p.s. would completely disguise the nature of the scale. I find, we should start with those notes of which we have at least some guarantee that they are in tune. These are: 464, 426, 391 V.p.s., being identical on both xylophones. The interval 464 to 391 V.p.s. is a clear minor third and the note 426 V.p.s. divides this third just into the half, being 148 Cts. apart from either side. These are a few facts which can hardly be coincidental. May we assume that the approximate standard interval of the Bakonjo xylophone is 148 Cts.?

The difficulty in the investigation is that only two scales have been available for comparison and even these seem to be out of tune in some parts. Let us try to "arrange" all the other notes of the two xylophones around this nucleus of 2 ... 148 Cts.

We see from the graphs that it would be very risky to make any definite conclusion on the nature of the Bakonjo xylophone scale, without proof from further field work. It is striking that on the Endara of P. Kivinga all two-key-progressions are in the lower range something like minor thirds. If this would consequently be kept throughout the range of the xylophone, then we would have a tempered eight-tone scale consisting of 3/4-tones. But the Keys I, II and III do not fit into this scheme. It may be worth mentioning that the top keys despite this fact have relations to other keys of Kivinga's xylophone. Key I, for example, is a fourth from Key IV.

A short analysis of form and harmony in the composition "Loan" shows a cycle of chord progressions, which, as I found, is basically the same in the other compositions recorded:

Harmonic cycle:

\[
\begin{align*}
\text{II} & + \text{II} & + \text{I} & + \text{V} \\
\text{VIII} & + \text{X} & + \text{IX} & + \text{X} \\
\text{II} & + \text{II} & + \text{I} & + \text{IV} \\
\text{VIII} & + \text{X} & + \text{IX} & + \text{X}
\end{align*}
\]

II/VIII and IV/X are slightly sharpened major sixths, V/X is a minor sixth and II/X and I/IX are octaves sharpened almost a quarter tone. Am I right if I assume that they should be pure octaves?

**APPENDIX.**

A. The musical instruments of the Bakonjo:

Most of the musical instruments cited below we could not see ourselves, since there seemed to be nobody who still played or possessed them. We had to get the instrumentarium of the Bakonjo through descriptions and drawings made by our various informants. A cultural and tribal inferiority complex is so pronounced in present-day Bakonjo society, that there is not only a feeling of shame for all playing of native instruments but even for speaking the mother tongue — Lukonjo. We discovered after three days research work that both the names of the instruments and religious terms had been constantly told us in Rutoro, the language of the neighbouring and obviously "superior" tribe. This, we then had to correct.

Here I wish to thank Mr. Semu Kiyonga Abwolikiyonga, a teacher from Bwera Secondary School who was not only our host during the time we stayed in his area, but also an inexhaustibly helpful interpreter. It is due to his efforts, that at this time, when it already seems to be too late for a profound study of Bakonjo music, we could at least collect valuable hints and reports. He is apparently also the only man

---

10 Stored in the Phonographic Archive of the Academy of Science, Vienna.
in this area who clearly sees the cultural loss which his country has suffered during the past twenty years, and who is trying to encourage traditional music among his people.

The Lukonjo names of some instruments are:

1. **Ekibbuleghe**, musical bow.
2. **Enzenze**, flat-bar zither with gourd resonator and three strings.
3. **Kinanga**, eight-string bow harp.
4. **Enanga**, seven-string trough zither.
5. **Endara**, fourteen-key log xylophone.
7. **Ebitsetse**, seed-shell rattle with three dry oncoba fruits threaded onto a stick serving as a handle.
8. **Akayamba**, reed-box rattle, filled with dry seeds.
10. **Ekitukulende**, ground bow.
11. **Akasai**, iron gong.
12. **Eluma**, a set of flutes, each of them being called **Erirenge**.
13. **Omupelo**, "a long flute played walking", no detailed information was obtainable.
15. **Enyamulera**, notched flute with four stops.

B. **Musical ceremony at funerals:**

The foot-bells (**Eiynzenda**) were usually put on at funeral ceremonies. At such funerals the people used to dance to the rhythm of three conical drums of different sizes: the smallest was called **Omughali**, the middle-sized **Eritundu**, and the biggest **Enenene** (or **Enzinzi**).

The day after someone had died the people started to dance and this lasted for about a week. If the dancing was not performed, the consequences would be very bad, "because the spirits of the dead (Abalimu) would kill a number of people". It is the purpose of the funeral dance "to chase away the spirit of the dead". (**Eribinga omulimu ow’qyulahola**).

But when a child dies which cannot yet talk, it is not necessary to drum and to perform the ceremony; because "only from the moment it speaks it is a person".

On the last day of the drumming the relatives of the dead bring sacrifices—a domestic animal and some cooked food. "An old man" (a priest) offers the meat to the departed spirit in a "special house used for this purpose" (a shrine).

In the olden days there were many other kinds of ceremonies and feasts, most of them taking place after the harvest of millet, in November.

**Recordings** have been made of flute sets called **Luma** by Hugh Tracey among the Bambuti pygmies and the Batoro. Both recordings show close affinity in the musical style and may give an idea how the **Eiynzenda** ensemble of the Bakonjo once sounded.

(a) "**Luma**" (Nyoro/Toro Tribe) LP 1173 Music of Africa, No. 8, Uganda Protectorate, fifth item, side A; recorded at Bundibugyo near Fort Portal on the 23rd August, 1950.

(b) "**Luma**" (Mbuti Pygmies); 10 pipes and two laced drums, recorded at village Mba.umbili, Beni, Congo. In the field cards there is the following interesting remark: "The end-blown flutes (**Luma**) were kept for the Pygmies by Bantu of the **Nande** tribe, who consider they have proprietary rights over them. The pipes may have been made by the **Nande** and not by the pygmies themselves". (Nande is the name given to Bakonjo people who live on the Congo side of the Ruwenzori massif).

**In a previous number of "African Music" there is a detailed analysis of Nyanulere music of the Nande tribe by John Blacking. The analysis is based on eight flute tunes from Butembo, Congo, which had been recorded by Hugh Tracey in the summer of 1952. The recordings are worth listening to for a student of Bakonjo music. Some of them are published on Gallotone GB 1703, and LP 1171, Music of Africa Series, No. 6. The article by Blacking deals in great detail with various musical and physical aspects of Nyanulere playing. (John Blacking: "Eight Flute Tunes from Butembo, East Belgian Congo" in African Music, Volume 1, No. 2.)