THE GANDA NDERE

AN EXAMINATION OF THE NOTCHED FLUTE OF THE BAGANDA PEOPLE OF UGANDA: ITS USAGE, MANUFACTURE AND REPERTORY;
WITH SPECIAL MENTION OF THE ROYAL FLUTE BAND OF THE FORMER KINGS OF BUGANDA.

A

DISSERTATION

Submitted according to the requirements of the University of Wales for examination for the degree of Master of Arts.

by Peter Cooke, BA (Wales) ARCM

1970

(Revised for PDF format 2015)
CONTENTS

Preface (Note on present publication) 2
Acknowledgements 3
Summary 3

INTRODUCTION

PART 1

Ganda Society and its music 5

Every day music: Ceremonial music: The uses of the flute:
Accounts of early travellers: The present situation

The Royal Flute Band 9

Royal ensembles in Uganda and elsewhere: The writings of Speke:
History of the flute band: Recent organisation

The Instrument 13

Materials: Nomenclature: Manufacture: Dimensions: Intonation:
Timbre: Playing technique

Kiganda Musical Style 20

Characteristics of speech and song (tone, syllable length and
Syllabic prominence): Song structure: Nuclear themes: The
flutist’s function

PART II

Transcriptions and notes on the sound text 27

CONCLUSION 47

BIBLIOGRAPHY 48

APPENDICES 50

PLATES 54

EPILOGUE 64
Note on the present version. 2015

Until now this thesis has existed in only 4 places: The first is my own typescript; the second was the bound copy deposited in the library of Cardiff University; a third copy was given to the library of what is now Makerere University (Uganda) and a fourth is in the library of the University of Nairobi (Kenya).

The text of this present version contains minor corrections, mostly concerning orthography and the way terms associated with the various bantu-speaking peoples of Uganda are presented. Up to the 1970s European authors considered it acceptable by to use general terms such as ‘Ganda’ without a prefix. These have here been changed. Thus Buganda is the name of the kingdom inhabited by the Baganda people (singular: muganda - a native of Buganda) while Kiganda is the adjective and Luganda the language. The one exception is the title of this dissertation which has been retained unchanged to avoid possible confusion.

An ‘Epilogue’ has been added to the thesis in order to bring up to date various changes in the usage of this particular flute particularly with respect to the fate of Abalere ba Kabaka the former royal flute band of the King of Buganda.

ACKNOWLEDGEMENTS

Without the patient help of many Ganda friends, particularly Bulasio Busuulwa, Christopher Kizza, Joseph Kyagambiddwa and Livingstone Musisi – my former colleagues on the music staff of the National Teachers’ College, Kyambogo – this paper could not be written.

I am also grateful to Dr. Gill Brown formerly of the Edinburgh University Department of Phonetics and Linguistics, for her invaluable help and phonological analysis of Ganda song texts.

Finally, I record my thanks to my wife, Diana, who accompanied me often on field visits, who gave helpful criticism and encouragement at all stages and who did much of the proof reading and typing of the original thesis as well as the retyping it in 2015 to produce this digital version.
Summary

Part I

The Ndere is a pentatonic notched flute popular among the Ganda people who live in that central part of Uganda known as Buganda. The intonation, timbre, playing technique, manufacture and dimensions of the different sizes are described in detail.

An early chapter describes the part music plays in the social, religious and ceremonial activities of the Baganda people and the use made of the ndere (pl. endere) at these occasions. Amongst the different musical ensembles maintained by the former kings of Buganda is one of four drums and a number of flutes in six different sizes. The history, traditions and organisation of this group, which was known to exist in the eighteenth century, are described up to the time when the group was disbanded following the dissolution of the kingdoms in Uganda in 1966. Twenty-one years later the kingship was reinstated but although various musicians, drummers especially, carried out their official roles at the coronation of the Kabaka Ronald Mutebi there was no revival of the various ensembles.

Luganda, the language of the Baganda is described as tonal and the song style is considered to be closely related to the tonal and rhythmic patterns of Luganda. These characteristic patterns, together with song structures, are discussed at length since the flutist’s repertoire is entirely based on songs. The players accompany singers or present instrumental versions of well known songs, often in ensemble with drums and other melodic instruments.

Part II

This discusses nine performances of three songs in the repertoire of the royal bands. The first item illustrates the sound of the royal flute band. Other items feature solo and duet performances on different size flutes as well as the sung versions of nuclear themes (also described as key texts) of the same songs. The notes and transcriptions that relate to the sound text attempt to define the relationships between the sung texts and their instrumental versions of the same and to show that the flutists embellish melodies in a consistent manner related to the phonological structure of the song texts. This same style of embellishment is paralleled in the performance of other Ganda instruments such as xylophones, lyres, harps and tube fiddles.
INTRODUCTION

Most people of the western continents tend to regard the music of Africa as interesting for its rhythmic complexity and for the variety of percussion instruments. There are some grounds – which I shall not discuss here – for saying that this view has affected the approach of musicologists to the music of Africa. In choosing a flute for my study, I hope in some small way to help correct this bias, for Africa is a continent rich in songs with melodies well worthy of study in themselves and the field for research into the interplay of pitch, timbre and rhythm in African music is vast and largely unexplored.

Uganda boasts a large variety of melodic instruments used by its thirty or more ethnic groups. Harps, lyres, trough-zithers, tube-fiddles, musical bows, thumb-pianos and horns – apart from flutes of many kinds and the ubiquitous drums – feature prominently among the different musics. It is true that there are also many other percussion instruments but often these are used in a melodic manner and, like the xylophones and drum chimes, they some fall into a category of tuned percussion. There are, too, many indications that a study of the melodic aspects of drumming would prove very rewarding. All these instruments have been described by Wachsmann (1953) in an organological survey which stands out as one of the very few musicological studies to come out of this huge continent. Little has been written about the use of these instruments or their repertoire, apart from the *Kiganda* xylophones. They alone have received attention in recent years, notably from Kubik and Anderson (see bibliography) who have provided much informative data.

Flutes, perhaps more than any other of the melodic instruments, lay a strong claim to detailed study. None of the others I mentioned above can produce a sustained melody or imitate the human voice in song. The one-string tube-fiddle is played using a very short bow and a rapid bow action as an accompaniment to song, while the trumpets each produce one or two notes and, like the oft-mentioned Russian horn bands, produce their melodies hocket fashion. Flute music should therefore be of value when one studies the concepts and processes that underlie the instrumentalisation of song melodies. In Uganda this is especially relevant since very little instrumental music is not based on song. I have chosen the notched flute known as *ndere* or *mulere* used by the Ganda people because the members of the semi-professional bands of flutists – the Abalere ba Kabaka (the king’s flutists) – have, over the centuries evolved a highly sophisticated and homogeneous style of playing. The need for such a study has, furthermore, been heightened by recent political events in Uganda. The inevitable conflict between the powerful king of Buganda and the central government of independent Uganda resulted in the flight and subsequent death in London of Kabaka Muteesa II, in the destruction of his royal trappings and the disbanding of his royal orchestras.

This thesis is planned in two main sections. The first is a descriptive study of the instrument itself, its history, manufacture and usage, together with a short account of the royal flute band. The nucleus of the second section is a set of edited sound illustrations based on field recordings made by me during the period 1964-68. They are accompanied by transcriptions and analyses. The tape forms an essential part of the presentation. It is a fairly simple matter when discussing aspects of western ‘art’ music to assume that the reader already has a musical “frame of reference” or has access to a number of excellent commercial disc recordings – either of which needs little more than a printed score to complete the data. In the case of African music and, indeed, any other music, this cannot be assumed, for transcriptions alone cannot convey an accurate or complete sound picture, despite the use of modern tools of musicologysuch as spectral analysis and frequency measurement, etc. In any case, the results of such work often present to the reader formidable problems of interpretation.

During my four years of work and study in Uganda (1964-68) I had the privilege of working with a master flutist and former member of the royal band, Mr. Bulasio Busuulwa. I was fortunate
in being able to employ him as the first teacher and maker of traditional instruments at the National Teachers’ College where he assisted in the training of student-teachers for work in Uganda’s secondary schools. His teaching, his playing, and instruments made by him form much of the data for this paper. His credentials are without question and he is recognised by his peers as one of the most able flute players in Kiganda tradition. One visit to the royal palace (Lubiri) on the very last occasion of the official birthday of Muteesa II produced a recording of the enlarged royal band (November 1965). It is unique because, as far as I know, no further recordings were made of the band and because there were a larger number of performers there than usual. This data, together with visits to other flute players, including Mr. Busuulwa’s old teacher (Mr Bulasio Katikamu of Ndese) has been supplemented by my own efforts to learn some of the flute songs under the patient tutelage of Mr. Busuulwa and by recordings of other instrumental styles used for comparative purposes.

GANDA SOCIETY AND ITS MUSIC

The former kingdom of Buganda was, when the first European explorer, Speke, visited King Muteesa I’s court for the first time in 1862, the largest and most powerful of the kingdom states in the inter-lacustrine region of East-Central Africa. The Baganda are still the largest single ethnic group in Uganda and in the 1959 census they numbered more than one million. They inhabit a large, fertile and well-watered area bordering the northern and western shores of Lake Victoria (see map, Appendix I). Though Buganda lies on the equator it has a climate much modified by the average altitude (4,000 ft.) and the proximity of the lake. “Linguistically the Ganda are among the northernmost members of a closely related Bantu speaking peoples” (Fallers: 1960, p. 30) but are thought to consist of a fusion of Bantu agriculturalists with a minority element of immigrants – possibly nilotic Lwoo peoples – who established a strong monarchical authority which according to oral traditions goes back some 23 generations to the time of the first king, the legendary Kintu. Such fusion seems to have taken place in spite of the fact that in the neighbouring kingdoms of Rwanda, Nkore, Tooro and Bunyoro the immigrants were evidently pastoralists who kept themselves apart from their conquered subjects. The Baganda kings established a strong feudal society with their powers dispensed throughout the kingdom through the agency of their clan chiefs. In such comparatively settled conditions a sophisticated way of life developed along with distinctive cultural achievements, such as the royal bands of retainer-musicians with their complex instrumental styles.

British administrators found it convenient to establish their centre of trade and government in Buganda and to use Baganda as their administrators in other parts of the one-time protectorate of Uganda. Recent events, have, however, radically altered the face of Buganda following a conflict between the king (Kabaka) Muteesa II and the central government of independent Uganda. It has now lost its semi-autonomous status and is divided into three administrative districts. The king died in exile (1969) and the former royal palace (Lubiri) is now the home of the Defence Ministry. The royal musicians no longer meet, of course, and many have vowed not to sound their instruments until a new Muganda king is crowned. There are precedents for this, for in earlier years they were silent when their Kabakas were exiled by the British.

It is no easy matter to categorize Kiganda music, which reflects closely, as one would expect, the diverse nature of Baganda society. Kyagambidwa (1956, p.V) found it convenient to group the different song types into the following classes:- religious, ceremonial, work, play, dramatic, folklore, recitative, odic and popular. I will attempt to classify Kiganda music by relating it closely to different aspects of the social life of the Baganda, though this is complicated by the fact that one song style and its repertoire will frequently be used for a variety of different social situations. The baakisimba dance songs exemplify this. They carry both historical and topical texts and feature in
many different social events both domestic and ceremonial. Since it will be referred to frequently, the term baakisimba deserves further comment at this point. It is used to describe the dance itself, the characteristic melodo-rhythmic formula that identifies the dance, and the drum that sounds this rhythm. Baakisimba rhythm is by far the most common type of rhythmic structure on which songs are based and seems to lie at the very core of Kiganda musical style. Most Kiganda songs, even children’s songs, are composed to this rhythm or will fit it, and it seems to have its genesis in common rhythm patterns of the poetic language of the Baganda. Some Baganda have described the baakisimba as their ‘national’ dance. The constituent drum parts are analysed later.

Despite the frequent usage of the same songs for many different occasions, two broad categories of every-day music and ceremonial music can be observed and subdivided as follows.

I EVERYDAY MUSIC

(a) Occupational songs

Men, traditionally warriors, hunters and fishers rather than cultivators, have their own songs associated with war and the chase, both of which are often accompanied by calls blown on animal horns (engombe) which inspire courage, sound alarms, or give information on the progress of the chase. There are also songs to accompany the rhythmic labour of paddling and hauling out canoes.

Women, the cultivators, sing special songs when hoeing their plots as well as, of course, lullabies for their infants. The latter, as often as not, are carried around on the backs of their mothers at work and even in dances and thus get a very early and effective introduction to the rhythms of life.

Young boys, whose main task is herding the few head of cattle, amuse themselves by making temporary whistles (paapaali) from the stems of the paw-paw tree or occasionally play flutes in imitation of the Hima herdsmen who are often employed by wealthier Baganda to look after their cattle.

(b) Recreational music

Beer drinking with one’s friends and relatives is a frequent adult social event. Here one finds many of the topical songs, informal dancing to baakisimba song rhythms provided by one or more drums (engoma) – the full complement is four – and gourd rattles (ensaasi). There may also be used flutes (endere), tube-fiddles (endingidi) or even a lyre (ndongo) or a xylophone (amadinda). A popular sport of men is wrestling, organised at a village (muluka) or inter-county (ssaza) level. Again, the flute is an important feature of the instrumental band which, with drums and rattles, leads the performance of special wrestling songs sung by rival groups of supporters. In this case, it is always one of the smallest flutes, whose high-pitched notes are more easily heard above the general din of the supporters.

Children have their own body of play songs sung to a variety of movements, and story songs (enfumo) that are incorporated into the traditional tales told to them by their older brethren or by adults in the evenings.

(c) Educational music

The tales often have a socialising function and the associated songs, performed unaccompanied, are sung at several points during the telling of the tale. Other semi-educational song types are the children’s counting songs and warning songs; and for adults at beer, much oral tradition connected with the history of the Baganda and their kings is handed down in well-loved historical songs, often of the praise type sung inside the royal enclosure.
II CEREMONIAL MUSIC

(a) Religion and magic
This has its own musical setting. Different songs are meant for the ears of the different Baganda gods (Lubaale). In the possession dances associated with the god, Kirimu, the one who is possessed puts his fingers to his mouth as if playing on a flute. When this occurs, Baganda say, Kirimu has called for his flute. The use of gourd rattles by the priests is an important feature of all such religious and magical songs.

(b) The life cycle
Whereas any kind of music might be used to celebrate the birth of a child, that of twins (abalongo) calls, as in many other East African societies, for the use of special ritual songs. The traditional wedding feast also has its own special dance (embaga) rhythms played on the mbuutu drum and the long drum (ngalabi) and it is here that the lyre and tube-fiddle are most popular, though the flute can also be used. Busuulwa, for instance, has several embaga songs in his repertoire. The tempo for embaga rhythms and the associated dance movements is much quicker than that for the baakisimba dance and, at the weddings of wealthier Baganda, semi-professional dancers will be hired to perform this difficult dance. Another important occasion that brings families together is the feast called okwabye olumbe (lit. dispersing death) when the last rites are performed some six months to a year after the death of the head of a family. The ngalabi can be heard throughout the night, sounding rhythms to baakisimba songs as well as special songs for this occasion. The next day the new head is named and presented to the family to the accompaniment of clan rhythms (which are usually associated with texts) known as emibala (pl.) and which are beaten with sticks on the family drum.

III ROYAL MUSIC

Other occasions calling for music and dance are ceremonial welcomes given to important visitors, while the most elaborate of all musical events are those formerly associated with the king, his coronation and anniversaries of that occasion. Then not only the royal bands were present in full strength, but instruments linked to all the different clans, as well as the sacred royal drums, were on view and used by their appointed keepers. While these royal ensembles deserve a chapter to themselves, it should be noted that many of the musicians did not reserve their talents exclusively for their Kabaka but were much in demand as instrumentalists and singers at weddings and other feasts of commoners for which they often received payment in cash or in kind. This was a way in which old songs connected with royal traditions were kept fresh in the minds of commoners and the semi-divine status of the king maintained throughout the kingdom, for some of these songs were often performed alongside more popular and topical songs during the same festivities.

Within this broad spectrum of musical activity the flute has no precisely defined usage. I mentioned that it features in musical ensembles at weddings and wrestling matches and will discuss later its prominent place in several royal ensembles. Apart from this, the flute seems to be a fairly popular instrument of domestic entertainment and a flutist will often take his instrument with him when he goes for beer. Most of these situations are secular ones, however, and one must assume that Wachsmann did not have the Baganda in mind when he gave some of the uses for the flute in the area around Lake Victoria. In this case he was listing some of the magical properties of flutes as “preventors of storms, makers of rain, encouragers of the flow of milk from the cow’s udder during milking, symbols of defloration, givers of life to the divine ruler and voices that are personal possessions and must not be imitated.” (1961, p.48) The ndere itself may well once have been more closely associated with cattle. Some Baganda informants think the flute was originally a herdsman’s instrument and suggest that the Hima cattle people, who are often employed by wealthier Baganda
to look after their herds, originally introduced it. Its use by young Baganda boys while out herding lends weight to this cattle association. Furthermore, many of Wachsmann’s comments certainly apply to the neighbouring former kingdoms of Nkore, Bunyoro and Tooro which have always had close relationships with the Buganda kingdom and are believed to have had similar origins.

Apart from the diary of J. H. Speke, the first European to visit the Buganda court and whose descriptions I will discuss in the next chapter, several early accounts of visitors to Uganda mention the popularity of the flute in Buganda. Johnston, one of the early British administrators, writes: “The Baganda are great flute players. They make flutes out of thick canes of sorghum, elephant grass, the Phragmites reed, sugar cane or bamboos and play on them most agreeably.” (Johnston, 1902, p.663)

Earlier still the German explorer, Kollmann, wrote:- “The Mganda is fond of music. You may hear individual people play the flute for hours at a time on the march, in camp or of an evening, by the fire….Side by side with these, they make flutes of different shapes. The most usual flutes are made of cane, in which holes are burned with glowing chips of wood. The blower holds it in the pursed up mouth vertically with both hands and his fingers open and shut the holes in turn. The tones are not unmelodious. The prevailing air is repetitive and monotonous.” (Kollmann, 1899, p.37)

Bishop A. L. Kitching, one of the first missionaries to Uganda, similarly found the music of the flute not much to his taste:- “Another instrument which can be enjoyed without the need for company is the playing of the harp or flute. The latter instrument is exceedingly simple; a hollow reed cut in the nearest swamp, with a few holes in it, costs nothing and is easily replaced if broken, but it serves to while away the time when you are out in the long grass herding. It is also an instrument much beloved of porters on a journey, being of so little value and so portable. Some men will even play as they march with a 60 lb. load balanced in their heads, but most prefer to wait until the remainder of the caravan – or at any rate the European – want to go to sleep and then strike up a weary monotony of reiteration, which dins with a maddening insistence upon the ear and drives sleep ever further from the eye, until a frantic dive out of the tent sends the player flying for his life and peace descends upon the camp.” (Kitching, 1912, p. 228)

Though Kitching is supposedly writing about the Baganda, the tune which he quotes as coming from Mwenge county in west Buganda (see Appendix II) is very similar in structure to Hima melodies I have collected in Nkore and it is clear from his transcription that the player was blowing notes in the range of the third harmonic as well as the first. This technique is not used by the Baganda who generally restrict their compass to the first two harmonics.

Such descriptions suggest that at the time they were written the flute was a more popular instrument than it is today. This is perhaps true of all the traditional instruments for which there are several reasons, all stemming from the increasingly strong external influences on the economy and the cultural life of the Baganda. When missionary posts were established traditional song and dance were considered unfit for Christian Africans. British administration, as well as the churches, established schools based on European modes of instruction, teaching skills which had no roots in traditional patterns of life. The advent of the transistor radio and the ubiquitous guitar has also made an impact despite the musical conservatism of the Baganda and their pride in their own instruments as distinct from those instruments of other peoples. Since Uganda became independent in 1962 there has been a resurgence of interest in indigenous music and many schools attempt to organise – not very successfully – the teaching of African instruments. The college in which I taught now includes in its music department staff four traditional Baganda musicians who teach their skills to student teachers and make a surplus of instruments for sale to other institutions. However, the traditional pattern of learning the flute, which required long hours of patient apprenticeship and a gradual absorption of repertoire and technique orally taught by the older players, is sadly out of line with present day ‘European’ modes of education which have the usual literary basis. Baganda schoolboys have, like their counterparts elsewhere, little time for what some consider to be an outmoded instrument.
THE ROYAL FLUTE BAND (ABALEREB A KABAKA)

In Africa, as in other continents, rulers have been and frequently still are great patrons of music at their courts. Often musical instruments and their music feature at crucial parts of coronation ceremonies. In west Africa among the Bambara the Tabale drum and the Ngoni harp are symbols of kingly authority and an elaborate symbolism has grown up around them. In Uganda too one can cite similar instances. The crowning of the Kabaka and other kings was solemnised by the new king’s act of beating the pair of royal drums. To capture these drums is to usurp the power of the king. Visitors to the grave of the dead king Kabarega, who died in exile in the Seychelles some time after 1899, will still find his two personal drums and other regalia – symbols of his former royal power – faithfully guarded by an elderly pensioner. Similarly, in neighbouring Nkore the pair of drums, Bagyendanwa, were carefully guarded along with other instruments, notably the Esheegu cone-flutes that also symbolised royal power. Bagyendanwa was, in fact, personalised as the “ideal king” of Nkore and stood at the centre of all kingly cults. (Van Thiel, 1966/67)

Nketia (1965, p.8) writing of west African kings, suggests that they went out of their way to “encourage the creation or adoption of new royal orchestras, new musical types or sometimes a feature of a new musical style.” As in Buganda, the names of kings responsible for the different orchestras in the court of the Fon of Dahomey are cited in oral tradition. Nketia also refers to earlier practices of the Denyira, who cut the noses of slave girls in order that they might sing “sweet dirges to the king”, thus suggesting that a nasal quality of voice was required (a quality often cultivated by professional women singers in Buganda). It seems, too, that in west Africa as in Uganda, the number of musicians attached to a court and the variety of instruments and ensembles is an index of the might of that king (J. H. Nketia, “The History and Organisation of Music in West Africa”, (duplicated) University of Accra, Legon, Ghana, n.d.).

The Kabaka’s royal flute band is only one of several ensembles recently found at his court. Until 1966 there were residing within the palace grounds in grass-roofed buildings built in the traditional architectural style of former palaces, the following instrumental units:-

The Entenga (tuned drum chime) ensemble of 12 drums discussed in detail by Wachsmann (1965) and Anderson (1967 and 1977).

The Entamivu or Entaala, composed of a 12 keyed xylophone and 6 drums.

The Akadinda, a 22 keyed xylophone played by 5 men.

The Endongo ensemble of numerous bowl-lyres wit a flute and sometimes tube-fiddles (endingidi)

The Ennanga (a bow-harp) used by one man who sang as he played.

For special occasions the royal horn band (amakondere) would also be called to the palace as well as various groups of drummers with the special royal drums entrusted to their care.

Not only in the Kabaka’s court itself, but also at some of the more important shrines of the dead kings in Buganda, it was the custom of the keepers to perform historical songs for visitors. Smaller ensembles were active in the courts of the other kingdoms in Uganda. The Abakama (kings)
of Bunyoro and Tooro also had their bands of horn players who attended the palaces for important functions. A rather different type of flute ensemble, found at both those courts and at the court of the Omugabe of Nkore, as well as formerly in the palaces of other lesser kings of western Uganda, is the cone-flute ensemble known as Esheegu in Nkore (Enseegu in Tooro and Bunyoro; Iseengo in Bufumbira County of Kigezi district). Neither of the Abakama had an ensemble of notched flutes and that of the Omugabe was reputed to be in imitation of the Kabaka's group (Van Thiel; seminar Makerere E.A.I.S.R., 1965)

Apart from oral traditions, the earliest and most important account of the royal flute band is to be found in the diary of J. H. Speke, who met Kabaka Muteesa I in 1862. One can only pay tribute to Speke's acute powers of observation and cool presence of mind that, at a time when he was uncertain whether or not he would be feted, slaughtered or simply ignored by the proud and cruel king, he had the presence of mind to note details such as the following:- “But for a few minutes only was I kept in suspense, when a band of music, the musicians wearing on their backs two long-haired goat skins, passed me, dancing as they went along, like bears in a fair, and playing on reed instruments worked over with pretty beads in various patterns, from which depended leopard cat skins – the time being regulated by the beating of long hand drums.” (Speke's Diary, 2nd Edn., 290)

Later, when being entertained by the queen, with whom he drank the traditional beer known as pombe, he recounts:- “The band, by order, then struck up a tune called Milélé, playing on a dozen reeds, ornamented with beads and cow tips, and five drums of various tones and sizes keeping time. The musicians dancing with zest were lead by four bandmasters, also dancing, but with their backs turned to the company to show off their long shaggy goatskin jackets.” (ibid, p.313)

Speke's “bandmasters” could more suitably be described as professional dancers performing the graceful baakisimba dance which features lively pelvis movements, often exaggerated by skins and costumes fastened around the hips and which requires the dancer to face away from spectators in order to display his or her skill in the most effective manner. The name 'Milele' (being a plural form of the noun mulere, another name for the ndere flute) was the probable answer he received to the question “What are they playing?” – it does not signify the title of any known flute song. The accuracy of his descriptions, however, can be testified by observation of Cunningham's “Uganda and its Peoples” (p.213) - see Appendix III. Few endere are seen nowadays with cat or goat-skins attached to the bottom, though this is still a common decoration found on flutes in neighbouring Busoga (see Plate 15).

Judging by Speke's account, Muteesa was himself a keen flutist, for again Speke writes (p.355):- “I went as requested and found the king sitting outside the palace, on my chair dressed in cloths, with my silk neckerchief and crest ring playing his flute in concert with his brothers, some 30 odd young men and boys, one half of them manacled……..we then both sat side by side in the shade of the court walls, conversed and had music by turns...."

Sir Apolo Kagwa, a former prime minister of Buganda at the beginning of this century, gives mention to some of the royal orchestras in his “Ekitabo kye Mpisa za Baganda” (Book of the customs of the Baganda) first published in 1905. He comments:- “There were in all about a dozen or two flutes. There were two dancing drums and an Engalabi associated with them. Played together they produced a fine harmony.” (Mandelbaum Edel, 1934, p.149) By “dancing drums” he probably means the ‘Uganda’ type double-skin drums called baakisimba and mpuunyi which are played commonly with ngalabi (the long single skin hand drum). Earlier he had remarked on special privileges granted to certain men including musicians who, unlike others who misconducted themselves within the capital, were not liable to arrest and slaughter – a common event during Muteesa's time.

“Several people of different professions were exempt from this liability to wholesale and capricious arrest:

“Flutists, who always carried a bag for flutes as a mark.”
“Trumpeters, who always wore the trumpet tied around their necks.” (ibid, 1934, pp 80-81
The Kabaka’s flute band is probably more than 200 years old, for there is a tradition cited by Wachsmann (1965, p.4) that Kabaka Kyabaggu was highly amused when the flutes composed a song Ow’ekiwallaata featuring his bald head. The song is still in the repertoire of the flute band though Kyabaggu died, according to most calculations, somewhere near the end of the eighteenth century. At that time, too, the horn band (amakondere) existed (for they are also credited with a song about him) and he is reputed to have adopted the entenga ensemble during his reign. The flute band appears to have been well established by that time.

Busuulwa provided the following information about the organisation of the recent flute band. Six villages took turns during the year to supply a team of flute players who resided in the musicians’ compound in the grounds of the palace (Lubiri) for two months at a time. Each group had its leader.

<table>
<thead>
<tr>
<th>Village</th>
<th>County</th>
<th>Leader</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ndese</td>
<td>Kyaggwe</td>
<td>Buko of the Ensenene (grasshopper) clan</td>
</tr>
<tr>
<td>Nywedde Malwa</td>
<td>Kyaggwe</td>
<td>Erimia Nkassi of the Enkima (monkey) clan. He also held the office of Secretary to the Band</td>
</tr>
<tr>
<td>Katira</td>
<td>Kyaggwe</td>
<td>Also led by Erimia Nkassi</td>
</tr>
<tr>
<td>Kabulo</td>
<td>Kyaggwe</td>
<td>Moses Mubiru of the Mmamba (lungfish) clan (This team also included Magumba, the official leader of the Abalere. This was a hereditary office and, in fact, Magumba himself was not able to play the flute – though his father did.</td>
</tr>
<tr>
<td>Nakifuma</td>
<td>Kyaggwe</td>
<td>Musitafa – a Moslem and well-known player much in demand at weddings. Busuulwa and his teacher, Bulasio Katikamu, belonged to this village.</td>
</tr>
<tr>
<td>Butto</td>
<td>Bulemezi</td>
<td>Male of the Kkobe (chestnut) clan. He was Regarded as the finest maker of flutes.</td>
</tr>
</tbody>
</table>

During Kabaka Mwanga’s reign, 1884-97, the flute band did not live within the palace walls but journeyed to the musicians’ compound each day from a nearby village. It is reported that flutists who remained within the palace grounds after 5 p.m., when their duties for the day were finished, would be killed. Like other ‘criminals’ they would not be allowed to make a will and so their property would be confiscated. The song Asigala talama belongs to this period (“He who does not go, cannot make a will”) and it became the tradition to make this the last item of the day. This had begun at dawn (7 a.m.) for the king was always woken to the music of the flutes playing Anamwanganga. Apart from these two songs the repertoire would be played in no special order and the contribution of the flutes (who always played each song twice) would be interspersed throughout the day with music from other ensembles if the Kabaka was in residence. During Kabaka Daudi Chwa’s reign (1897-1939) the flutists lived in Bwaise village and it was only during Muteesa II’s time that special quarters were provided within the compound for the flute band.

For special occasions, such as royal weddings, official birthdays, etc. all the players would be expected to come to the palace to augment the resident group. The last such occasion was in November 1965, on the official birthday of Muteesa II when more than 12 flutists attended the palace. Some of these players are shown in Plate 3 along with two drummers.
Four drums are beaten in the ensemble. The player of the long drum (*ngalabi*) is also expected to sing while improvising a variety of hand-beaten patterns within the framework provided by the three other Uganda type drums. The drum music is discussed in some detail in a later section.

Though they were considered a privileged group, the general lowly status of the royal musicians was reflected by their meagre salary of 60 shillings per month and by the fact that Busuulwa considered he was promoted when he was given the office of manservant in the royal bedroom and his salary increased to 80 shillings (1966).

The flute band repertoire consisted in 1966 of some 36 different songs, all of which were known to Busuulwa. Some of these songs were known and performed only by the flute band though many others formed part of a general pool of royal and historical songs which could be performed by other ensembles and by the harpist (*omulanga*).

Two other royal ensembles containing flutes should be mentioned, though I can do no more than this as I did not get the opportunity to study them. The first is the bowl-lyre ensemble (*abadongo*) which contained, in addition to numerous lyres, a pair of tube-fiddles (*endingidi*) and one flute (usually *entabitabi*, one of the smaller flutes). This group may be an expansion of the quintet, *omuwanjo gumu*, described by Wachsmann (1957, p.404). The second group is the *baakisimba* ensemble of 5 flutes and 3 drums formerly played at the tomb of Kabaka Muteesa I at Kasubi near Kampala (ibid. p.340).

Though the dissolution of royal power in 1966-68 saw an end, possibly permanent, of the Baganda royal ensembles as official groups, this has not necessarily been the case elsewhere. The horn band (Engwara) of the former king of Bunyoro, the Omukama, still functions, but now under the auspices of the Ministry of Culture and Community Development. Its players perform now for trade fairs, important visitors and, ironically, political rallies of the very same party that unseated their king, the Uganda People’s Congress. The Kabaka’s *entenga* ensemble may have been destroyed when the Lubiri was attacked; since then, however, a replica of the set of drums has been made by the former Kabaka’s drum-maker for the National Teachers’ College, and a former member of the ensemble, Livingstone Musisi, now teaches the instrument to students. Music that once belonged to the kings alone shows signs of becoming the property of the people.
THE INSTRUMENT

A variety of materials is used in Uganda for flute making. In the mountain rain forests on Uganda’s eastern and western borders the hollow flower spike of the giant Lobelia plant is cut down and quickly converted into a serviceable instrument. Bamboo is frequently used in northern Uganda and among the grasslands of the west, while everywhere modern materials such as lengths of brass or aluminium piping or plastic tubes from worn out bicycle pumps are readily pressed into service. The tone quality of the latter instruments usually seems quite acceptable and, of course, such instruments are much more durable. Children often make temporary instruments from the hollow stems of the paw-paw tree (*papaya carica*) and the castor oil tree (*ricinus communis*). In Buganda, however, in spite of what Johnston writes (previously quoted on page 9) – and he may have been using the word ‘Baganda’ to cover all tribes in Uganda – it is rare to find flutes made from anything other than the swamp reed (*phragmites mauretanicus*) known locally as *ekiwuuwe* (pl. *ebiwuuwe*). Certainly his suggestion that sugar cane is used must be an error for the cane is not hollow, nor can it be easily bored; he may have been misled by the fact that *ekiwuuwe* when it is still green closely resembles sugar cane. *Ekiwuuwe* is certainly highly suitable raw material. It is hollow, except for thin, pithy partitions at each node; the walls dry out to a suitable thickness and hardness and the cane is fairly robust – more so if, as professional makers do, the reed is cut some inches below the surface of the muddy swamp where the nodes grow close together. Finally, the reed can be found in most swamps and in various diameters, which makes it possible for flutes of different sizes to be produced, each with its own name.

In the Kabaka’s ensemble there were six different flutes, the largest being twice the length of the smallest. Though Wachsmann (1953) makes periodic comments on the etymology of the instruments he describes, it is worth adding to his information my own researches and setting out the whole as follows (smallest first):-

<table>
<thead>
<tr>
<th>Name</th>
<th>Etymology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entemyo or Akatemyo</td>
<td><em>Akatemyo</em> (n.) is the highest (and therefore the smallest) of the roof rings in the frame of a hut. The three highest strings of the Ganda harp (<em>ennanga</em>) and lyre (<em>ndongo</em>) share the same name as does, paradoxically, the largest of the three big drums played with the <em>entenga</em> (tuned drum chime).</td>
</tr>
<tr>
<td>Entabitabi</td>
<td><em>Entabi</em> or <em>Entabya</em> are the names given to the smallest gourd-trumpets of the <em>amakondere</em> trumpet sets in the three kingdoms of Nyoro, Tooro and Nkore. Strangely, the Ganda set includes no instrument of this name. <em>Ntabi</em> is the name also for the smallest string of the Nyoro harp and was once applied to the obsolete end-blown trumpet.</td>
</tr>
<tr>
<td>Ensaasi</td>
<td>The name also for the <em>Kiganda</em> pair of gourd rattles; and for the middle-sized <em>makondere</em> trumpet <em>Ensasi</em> (n.= sparks); <em>ensosi</em> - another name for one of the extinct set of end-blown trumpets</td>
</tr>
</tbody>
</table>
| Entengezi          | *Okutengeeta* (vb.) – to shake or tremble. Also the collective term for the largest 3 drums of the *entenga* set A flute song called “*Webale okutengesa*”: trans. “Thank
you for shaking” (the grasses or skins that hang from a dancer’s hips)

*Amatengezi* (n. pl.) – the three lowest strings of the Kiganda harp and lyre, i.e. the tremblers – so low in pitch that one can see them vibrate.

*Ekiwuuwe*  
Okufuwe (vb.) – to blow. *Ekiwuuwe* – possibly “that which one can blow”. Also the name of the swamp reed.

*Enkologi*  
*Okukologa* (vb.) – to mix up or blend. No other Instruments have a similar name.

Wachsmann described the way the flutes were made:-

“... Their manufacture is remarkable in that no acoustic test is applied at any stage of the process. After the reed has been brought in from the swamp the musician himself cleans its outside and cuts it to a length suitable, in his opinion, for a flute. He puts the reed to his lips as if he were playing in order to bring his fingers into the position he is accustomed to on other instruments. He marks the places where the two fingers nearest his mouth come down and the distance between them becomes the standard length which determines the position of the third and fourth stops. The hands are placed in such a way that a node of the reed comes between them. He then proceeds to burn the stops into the wall of the reed with a red-hot wire or nail. The pith is removed from the inside, first with a smooth, pointed stick and then with a stick slightly thicker and covered with branch knots which act like the rough surface of a file. This accomplished, a mark is scratched, carefully, in line with the finger stops near the upper rim for the notch. A V-shaped incision is cut with a knife and enlarged to a U-shaped notch with a red-hot iron. The flute is now ready except for the final process of proofing the material; it is dipped into hot water for a moment, greased with butter and exposed to the sun to dry. This rule of thumb results in the stops being placed at equal distances from each other.” (1953, p.339)

Busuulwa, who had learnt the craft of flute making from an acknowledged expert among the royal musicians, named Male (who was also leader of the royal team of flutists from Butto village, Bulemezi) followed a slightly different procedure. Having collected, washed and trimmed the canes, he placed them in the sun to dry every day for a week or more before undertaking to cut them to size and voice them. By this time the canes had shrivelled considerably. Then followed a cooking process. He collected a number of young banana leaf spikes from the heart of the sweet banana plants and the same night put the flutes out in the evening dew so that they absorbed some moisture throughout the night. Next morning he wrapped each flute individually in a young, tender leaf shoot, leaving the voiced end protruding, and steamed the flutes in a pot containing a little water and a packing of other banana leaves, so that for an hour or more steam seeped up through the mouth hole inside the glove-like leaf wrapping – which also imparted some of its pleasant yellow colour to the flutes. The result was that the canes had swollen out, lost their shrivelled appearance and were permanently “set” so that they would shrink no more. The proofing process mentioned by Wachsmann was then carried out to ensure that the walls would not leak or crack (just as in Europe most woodwind instruments are occasionally oiled). Finally, Busuulwa plugged possible leaks at the leaf scars below each node with wax over which he stuck attractive pieces of tin foil.

While he was making sets of flutes of the six sizes as used in the royal band, Busuulwa had been careful to obtain overall dimensions of the different flutes then in use, so that his method is not as haphazard as when another person makes an instrument purely for his own use as a solo instrument.

Only in neighbouring Busoga have I seen flutes decorated with beads and these days most Baganda players prefer to ornament their instruments with closely wound copper wire salvaged from
old armature windings, etc. Busuulwa was at pains to point out that such decoration also improved the tone of the flute. When not in use, the players store their instruments in the roof of the cooking hut where they are safe from ants and other borers and where they in time become thoroughly ‘smoked’.

INTONATION

Wachsmann’s comments (see pp 20-21) on the absence of acoustical tests lead us to an examination of the intonation of Kiganda flutes. Obviously not every flute made in the rough and ready manner he described will produce acceptable notes. Elsewhere (1950, pp40-41) he has made the point that the Baganda have a clearly defined tonal system and that, for example, harpists are meticulous in their attention to the tuning of their instruments. Comparisons with flute players of other ethnic groups in Uganda lead me to think that the Baganda are far less tolerant of badly tuned instruments than other peoples and that they consider good intonation (according to their criteria) an important ingredient in a musical performance. The mere act of spacing holes equal distances apart will tend to produce equidistant intervals, the only critical distances then being that from the notch to the highest hole and that between the lowest hole and the open end and the most critical test that Busuulwa ever made was to play melodies and listen for bad notes. Usually if he rejected one it was because the first distance mentioned produced too small an interval between the highest note of the lower octave and the lowest of the second octave. Experiments show also that ;humouring’ can alter pitch considerably on this type of instrument and that alternative fingerings can sometimes improve the worst note.

The many flutes which Busuulwa made were always copies of the set of six different sized instruments used in the royal band. The following table sets out the dimensions of such a set in my possession. This same set was used in ensemble playing by his pupils and in the tuning tests set out in table 2.

<table>
<thead>
<tr>
<th>Name of flute</th>
<th>Distance from top hole</th>
<th>Overall length</th>
<th>Diameter at wide end</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entemyo</td>
<td>16.3 cm.</td>
<td>34.4 cm.</td>
<td>Internal 2.3 cm., External 1.8 cm.</td>
</tr>
<tr>
<td>Entabitabi</td>
<td>18 cm.</td>
<td>40 cm.</td>
<td>Internal 2.4 cm., External 2.0 cm.</td>
</tr>
<tr>
<td>Ensaasi</td>
<td>21.5 cm.</td>
<td>46.3 cm.</td>
<td>Internal 2.5 cm., External 2.2 cm.</td>
</tr>
<tr>
<td>Entengezzi</td>
<td>25 cm.</td>
<td>53.3 cm.</td>
<td>Internal 2.7 cm., External 2.2 cm.</td>
</tr>
<tr>
<td>Ekiwuwe</td>
<td>2.0 cm.</td>
<td>62.6 cm.</td>
<td>Internal 2.8 cm., External 2.3 cm.</td>
</tr>
<tr>
<td>Enkologi</td>
<td>34.2 cm.</td>
<td>71.7 cm.</td>
<td>Internal 3.0 cm., External 2.5 cm.</td>
</tr>
</tbody>
</table>

Diameter of stops ranged from 0.8 cm. on entemyo to 1.2 cm. on enkologi.

The bore is gently conical – averaging 0.5 cm. less in diameter at the lower end.

Depth of notch ranged from 0.7 cm. on entemyo to 1.0 cm. on enkologi.
Such a family of flutes can cover in performance a range of three octaves. *Entemyo* is about half the length of *enkologi* and sounds an octave higher. The four flutes in between these two extend *entemyo*’s scale downwards each by one step in a pentatonic scale.

But what is the exact nature of this pentatonic scale? Unfortunately, no-one has yet come forward with convincing views on the specific type of scale or scales used by Baganda. Wachsmann once again must be quoted for his examination of the tuning methods adopted by a *Muganda* harp player (1950) and a xylophonist (1957) when he showed that both musicians endeavoured to adjust the tuning of their instruments towards obtaining equidistant adjacent intervals of a large tone (240 cents). Five such tones cover the 1200 cents of the octave. He followed this with a searching discussion (1966) of results of laboratory tuning tests with Basoga, Acoli and Baganda musicians. The results indicated again what he described cautiously as “a tendency towards equidistance”, for which he coined the term “Penequidistance”. He then discussed the still unsolved problem of whether or not such differences from the postulated 240 cents interval are musically significant to Baganda musicians and, if so, would such a scale incorporating larger and smaller intervals make possible any use of a pentatonic ‘modal’ system comparable to the heptatonic systems of Europe. In connection with xylophones and other instruments of the Ganda, much has already been written about the system known as ‘*muko*’ which involves an exploitation of the different effects produced when melodies are transposed up or down in pitch on instruments such as the harp, lyre and the two xylophones. In these cases the instrumental tune is confined to a range within the octave so that octave transpositions and other changes are involved when the *muko* is changed. Now comes the further question: Does this *muko* system depend for its effect partly on the different intervallic structures implied in pen-equidistance? Wachsmann leaves this question open for lack of further objective data.

Unfortunately, subjective impressions of Europeans can be very misleading, for the European ear, accustomed as it is to scales of tones and semitones, tends to rationalise intervals which are equidistant or nearly so into patterns of tones and minor thirds when listening to such music. To quote my own experience, I well remember being perplexed on first meeting and playing a pentatonic gong chime from Java by the fact that if one began a scale on any of the lowest three notes the position of the presumed larger intervals seemed to vary each time. Later, while in Uganda, I made a pentatonic xylophone and tuned it with the aid of a monochord to a pentatonic scale that was as nearly equidistant as possible, for the purpose of eliciting comments from Ganda musicians, all of whom praised the tuning. The tuning changed slightly from time to time according to conditions of humidity and to how the instrument was treated (hammering an xylophone key with a hard beater can change its tuning over time). The smallest change in the pitch of one note gave the ear the impression that an interval of a minor third lay above it if the note was flattened slightly, or below it if the note was slightly sharp. This was enough for the ear to interpret the whole scale in terms of tones and minor thirds. Because of the lack of equipment, it was impossible to establish by objective means whether or not in fact the instrument ever was tuned exactly to an equidistant scale.

Flutes cannot be relied upon to help in solving the basic problem for there are so many variables involved. There is some evidence to suggest that the position of holes may have been chosen for aesthetic effect rather than for acoustic reasons. Male is reported by Busuulwa to have positioned the two middle stops slightly closer together than the outer ones and traditionally, both these central holes are placed for pleasing visual effect in the space between two nodes. More important acoustically than minor adjustments in the spacing of holes is the size of the holes and possibly the diameter of the bore at different places along the flute’s length; usually the bore is wider midway between two node swellings than at the nodes where there is often a restriction which cleaning the bore of the flute with a rough stick does not entirely remove. I was unable to discover whether or not the flutists modified tuning while playing by such means as shading holes, humouring notes into tune or employing certain cross-fingerings.

Most did not seem to do this. Then, as far as ensemble playing is concerned, altering the embouchure can sharpen or flatten the whole range of notes, as can increasing breath intensity. It must be obvious,
then, that a team of ‘thumb-piano’ players can put their instruments much more accurately in tune than ever the flute is customarily tuned, so the table of tunings set out below should be studied with caution, especially when evaluating pitch discrepancies between the respective instruments.

TABLE 2. Analysis of tunings of a set of Kiganda endere
NOTES

1. These measurements were obtained in the following manner. I recorded all the individual notes (blown by me) on tape and used the same recording machine to play back the signal into a Stroboconn (visual electronic device for objective pitch measurement) at the School of Oriental and African Studies, London. It is beyond my means to analyse the frequency of notes played during performances of songs by Ganda flutists so the following errors may have been created:-

(a) I may not have produced the same pitch notes as a Ganda flutist might, though I did endeavour not to change embouchure while playing on each instrument. I may also have failed to use fingerings which the Ganda might use for certain ‘abnormal’ notes, though I did use the basic fingerings which had been taught to me.
(b) A percentage error might have been produced because of the fact that recorders do not feed tape at a constant speed. The fact that the recorder used was a variable speed Reflectograph fitted with a strobe which was referred to at regular intervals still does not obviate this chance of error.

2. The largest flute, enkologi, was not tested in this manner but was tested subjectively using a simple calibrated sonometer.

3. The figures following + or – indicate the number of cents sharp or flat of the European tempered notes.

4. First and second harmonics only were tested.

5. When looking for intervallic relationships between adjacent notes I preferred to average the intervals in the two octaves.

EVALUATION

Despite all the reservations about the value of examining flute intonation, the following facts deserve mention.

Large tones predominate.

Intervals between successive fingerings from all six flutes can be averaged as follows:-

<table>
<thead>
<tr>
<th>Basic fingering</th>
<th>Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Notes 1 &amp; 2</td>
<td>234 cents</td>
</tr>
<tr>
<td>Notes 2 &amp; 3</td>
<td>257 &quot;</td>
</tr>
<tr>
<td>Notes 3 &amp; 4</td>
<td>211 &quot; (a result, perhaps, of the middle two holes being slightly closer together)</td>
</tr>
<tr>
<td>Notes 4 &amp; 5</td>
<td>272 &quot;</td>
</tr>
<tr>
<td>Notes 5 &amp; 1</td>
<td>219 &quot; (the interval which is often the reason for rejection of a flute after manufacture)</td>
</tr>
</tbody>
</table>

If these flutes were designed to be played individually there may be ground here for suggesting that players were perhaps interested in alternating larger and smaller intervals. However, since these flutes are also meant for playing in ensemble such a system would cause difficulties if these intervallic differences were musically significant and if players did not attempt to correct intonation while playing.
This is more clearly appreciated if one bears in mind the fact that pitch of note for fingering 1 on entemyo is the same as that for fingering tone 2 on entabitabi and tone 3 on ensaasi, etc.  If we average out the tunings for each of the tones rather than each of the fingerings, the results can be tabulated as follows:-

**TABLE 4**  Average tunings of the whole ensemble throughout all the octaves compared with the tempered scale

<table>
<thead>
<tr>
<th>European Tempered Scale</th>
<th>Intervals</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>223</td>
</tr>
<tr>
<td>B</td>
<td>260</td>
</tr>
<tr>
<td>C</td>
<td>223</td>
</tr>
<tr>
<td>D</td>
<td>257</td>
</tr>
<tr>
<td>E</td>
<td>238</td>
</tr>
</tbody>
</table>

Here the intervals produced conform much more closely to a suggested equidistant one of 240 cents, though yet again there is room for allowing that departures of more than 20 cents from the norm may be significant in the Ganda music system.

Two other points should also be borne in mind before leaving the question of flute tunings.  As will be seen later, the music played is rapid and parallel unisons are avoided so that discrepancies in pitch are difficult to notice.  Discussions with informants gave the impression that they do attempt, by means of embouchure adjustments and alternative fingerings, shading, etc., to produce an agreeable ensemble.

Finally, since it is not profitable to examine these tunings any more closely, it may be that one should be scrutinising intervals resulting from leaps rather than those between adjacent notes.  While Ganda song is basically unilinear, melodic leaps abound and intervals of a fourth feature frequently in melodic as well as in instrumental ostinato patterns such as those used in akadinda technique and, as we shall see later, in flute melodies.  Whether one looks at table 2, 3 or 4, it is plain that the sum of two adjacent intervals will always produce a figure in the region of 480-500 cents.  A tempered perfect fourth is 500 cents, while a ‘just’ fourth is 498 cents.

**TIMBRE**

I subjected the tones blown (by me) on three different endere to spectrographic analysis with the co-operation of the Edinburgh University Linguistics Department laboratory.  The resulting sonagrams support subjective impressions that the tone is a very pure one – weak in upper harmonics – and very similar to that blown from eighteenth century European transverse flutes with conical bores.

Three different flutes were tested.  Two different ensaasi, the first having wire decoration bound on it, the second with no decoration; the third flute was the largest (enkologi) and was tested twice, firstly with its copper wire decoration intact and secondly after this wire had been removed.  Thus, I was able to test whether the tone of smaller flutes differed essentially from that of the largest as well as discovering if there were any acoustic reasons to support the preference of Ganda flute players for flutes that had wire winding applied.  Two facts emerged from this study:-
1. Upper harmonics (Nos. 2, 3, 4 and 5) of the smaller flutes were present in greater strength than in the larger flute.
2. Binding the flutes with wire does strengthen upper harmonics a little, thus modifying the tone just as the Ganda flutists maintained it did. Two remarks of Philip Bate are worth quoting – from his detailed study of European flutes – since they are relevant here. 
   “The stiffer we make a wall, the more likely it is to develop mechanical resonances of its own.”
   and
   “For centuries the playing musician has asserted that the material of his instrument affects his tone profoundly...it now begins to look as if there is some scientific basis for the player’s view.”
   (Bate, 1969, p.43)

Now we have support for this view from outside Europe. The practice of adding wire is in line with Baganda preference for instrumental tone rich in higher harmonics which is evidenced by other instruments they play. Their xylophones do not have resonators such as gourds found in other African xylophones) and are beaten with hard wooden sticks in play; their bowl-lyres are constructed so that strings rattle against the skin covering the bowl; and their harps have buzzing rings fitted to them which, again, modify the tone.

The results of the spectral analysis are graphed below but are only approximations since the sonagram does not measure amplitude of harmonics with any exactitude. I have included for comparative purposes similar data on the spectrum of a conical flute published in Bate, 1969.

**TABLE 5 Spectral Analysis.**

See Appendix IV for a sonagram of short melody played on an *ensaasi* flute.
PLAYING TECHNIQUE

The flute is held lightly between the thumb and second fingers of each hand leaving the index and ring fingers free to cover and uncover the four holes. The left hand is usually the higher. Fingers are held fairly straight at the joints, especially on the larger instruments so that it is often the middle joint rather than the soft finger pad that covers the hole. An embouchure similar to that for the European orchestral flute is used, except for the fact that the lower lip has to serve an extra purpose to that of helping to shape the air stream for it has to act as a plug and produce an airtight seal over two-thirds of the notched end. The narrow air stream is directed at the sharp base of the notch at an angle that sends most of the air away from the notch at an angle of about 20 degrees to the longitudinal line of the flute. Increasing this angle sharpens the note by as much as 50 cents, while decreasing it will flatten the note again. The throat passage is kept open and the tongue is rarely used after the initial note of a phrase and when it is used it never produces a complete closure of the air stream but performs an action like that used for a very soft ‘r’ or ‘l’ without being allowed to touch the dental ridge or hard palate. Occasionally a rapid contraction of the diaphragm is used to give extra attack to a note.

KIGANDA MUSICAL STYLE

Before one can profitably study any instrumental style of the Ganda, it is important that some consideration is given to Ganda song and its relationship to the spoken language – Luganda – for all instrumental pieces in the Ganda repertoire are, in fact, renderings of vocal compositions or are, in the case of drumming, inseparably bound up with song and other forms of speech communication. Wachsmann recognised this was especially true of the flute music and stated:

“As always in Uganda music one gets the impression that the sound is improvised, but in actual fact there are limitations to be observed by the flautists: to produce a melodic line which unmistakably must render the outline of the words of the song.” (Wachsmann, 1954, p.42)

It would, therefore, be of little value to study the sound patterns produced by instrumentalists solely by analysis of their intrinsic structure without searching for the route by which both music and speech through song has been realised on the instruments, though some musicologists have in fact made such an error, a recent example being Kubik’s study of the Ganda xylophone repertoire (Kubik, 1969).

GANDA SPEECH AND SONG

In this section I shall do little more than summarize the findings of linguists to date and try to relate these to my own experience of flute songs. More detailed linguistic information can be found in Ashton (1954), in the preface to any Luganda dictionary (e.g. Snoxall, 1967) and in Tucker (1962).

TONE

Luganda is a tone language with high, low and ‘falling’ tones. Absolute distances between various tones are not stable, however, and they vary in different contexts. Though relative differences between tones are preserved in isolation, the intonation of a whole tone group will perturb the realisation of some tones. In poetic song texts, however, intonation (used in the linguistic sense to describe variations of tonal levels to convey meaning and mood) probably does not feature prominently. It will be seen later that speech tone is closely paralleled in song.

SYLLABLE VALUES

Long and short syllables are found in Luganda. Long syllables always have twice the length
of short ones and are analysed as containing two morae (i.e. tone bearing units). For the purposes of this paper, long syllables will be transcribed as quavers and short ones as semiquavers, since these relative proportions are found in both speech and song.

Long syllables result in speech:

1. from the fusion of double vowels (indicated in the orthography) as in the middle syllable of *bwereere* (in vain);

2. from the fusion of two morae the first of which is a *w* or *y* (semi-vowel) and the second a vowel. Again, as in *bwereere* shown phonetically as in the illustration below.

3. from the coalescence of a final vowel with the initial vowel of the word that follows as, for example, in *abasiba embuzi*, pronounced *abasib’embuzi* (keepers of goats).

For convenience of song transcription, I also prefer to treat as single long syllables certain pairs of morae which are regarded phonologically as two short syllables. In the case of:-

(a) a vowel and the following syllabic nasal as in Kikwabanga and embuzi (though the latter example in the context of abasiba embuzi presents a special problem for it might be thought that the em coalesces with the preceding a to produce a “syllable” of 3 morae. In such cases contraction always occurs and no syllable of more than two morae ever results).

(b) A vowel is followed by double consonants as in bikuggu (pieces) where the first consonant (in this case g) has a syllabic value often heard only as a brief pause in the stream of speech or song.

Poetic song texts, therefore, contain various patterns of long and short syllables as in the following well known line from a royal song, ‘Ssematimba ne Kikwabanga’:-

“Abasiba embuzi, basibira bwereere. Aa! Ssematimbe ne Kikwabanga”

I have grouped the notes in the way in which Europeans tend to hear them, i.e. as a mixture of compound-duple and simple-triple time (“a” and “b” respectively). This ‘hemiola’ effect is peculiar to many African song styles.

SY LLABIC PROMINENCE

Though Tucker (1962 and 1967) uses the term “stress” I prefer to employ the term “prominence” for in Luganda and other related languages it seems that amplitude (loudness, physical density) is not an important structural factor. The impression of stress gained by Europeans listening to Luganda is more likely to arise from tonal relationships and syllable length as well as other considerations such as lexical quality, vowel harmony, care in articulation and unexpected syllabicity. This may account for the fact that the Ganda make little use of the tongue in articulating flute melodies, as my example tape will illustrate, whereas in European flute playing the tongue often has an important articulatory function that may be linked with the fact that most European languages are regarded as stress-timed languages where organised stress is often an important feature of the music.
All three factors – tone, syllable length and prominence – undergo a certain amount of regularisation when used in song. With the kind co-operation of the Phonetics Department of Edinburgh University, I was able to feed both spoken and sung poetic song texts into a pitch meter. The results showed that, in general, these three qualities are very closely preserved when word patterns are sung. Two fragments from two well-known song texts are reproduced here and illustrate the relationship very clearly.

The preliminary study had its limitations, however; firstly, the texts were song texts and not normal speech; secondly, the songs were so well known it was impossible to find any Ganda informants who did not know them and they may well have unconsciously modified their speech as a result of knowing the sung texts.

"Alijja ekisana alisanga mu diiro". "Ssinga mbuuse"

What is not so obvious from the graph but very obvious when one listens to singers is the way in which the different fundamental pitches are stabilized and glide from one tone to another are somewhat less obtrusive. The pitches are resolved into a more or less equal-stepped pentatonic scale similar to the Javanese Slendro type scale described by Mantle Hood (1966). All the Ganda melodic instruments are tuned to this scale which, in the case of the flutes, I have already discussed in some detail.

Other ways in which song regularizes texts are, of course, in matters of tempo and by fitting the texts into a regular pulse marked usually by hand claps. As I mentioned earlier, the most common songs are those for the baakisimba dance. Here the hand clap pulse marks every sixth syllabic unit at a tempo circa MM = 100. The rate of syllabic flow is very close to the average rate in normal conversation. For the wedding dance (embaga) the hand clap marks every third syllabic unit and the tempo is somewhat faster (MM = 120). The tempo of clap pulses seems to be closely related with bodily movement and with weight transfer in particular. That of the baakisimba is an easy, graceful movement (MM = 100) which is also matched by the foot movements in the dance as the body-weight is transferred from one foot to the other. It can be seen from the two following examples how well the texts fall naturally into a framework marked by the handclap pulse – undoubtedly because of this preponderance of compound duple and simple triple rhythms mentioned earlier. These two texts are from baakisimba dance songs belonging to the repertoire of the royal ensembles.
In this second example a certain amount of stretching makes sure that the prominent syllable in the word Ssematimba begins on the clap-pulse, each of the two syllables in Ssema being lengthened to spread over the time of three to achieve this. I have transcribed the most commonly found version of the nuclear “line”.

Ssematimba ne Kikwabanga  (Ssematimba and Kikwabanga)

“Those who keep goats, keep them in vain. Ah! Ssematimba and Kikwabanga”

It is, of course, impossible to represent accurately such a scale on the European staff (which is why I give no clef sign) unless one uses also some explanatory code-key. The staff which is designed to represent tones and semitones cannot cope well with large tones (1 & 1/5) two of which add up to make a ‘fourth’ (2 & 2/5 tones), though on the staff this will sometimes look like a major third. If one refers to the number code, however, the transcription should become clearer. Ganda xylophone music has been successfully and easily transcribed using just such a number code and continued use of it will make comparison with other instrumental styles easier.

I have mentioned earlier that patterns of duration and pitch in spoken texts are closely preserved in the sung versions. The texts, however, when sung are presented with a metronomic precision so that drum rhythms and hand claps can always accompany the songs. Features as rallentando or stringendo are extremely rare in Ganda music.

On paper, texts can appear to be more closely related to accompanying rhythms than they are perceived aurally. The first morae of long syllables generally coincide with the clap pulse and there is accordingly a preponderance of long-short patterns (eg.quaver + semi-quaver). However, durational prominence (if long syllables are perceived as being prominent) is often countered by other qualities that are not obviously related to the clap pulse such as tone contour. The result is that the texts seem, to the European ear at least, to float along seemingly independent of any rhythmic organisation and this quality is of course reflected in one’s perception of the flutists’ melodies.
SONG STRUCTURE

The songs in which the flute features, *baakisimba*, *embaga* and wrestling songs, all have a common cyclical structure with fixed lengths but employ a variable number of utterances of solo and choral-response phrases. The recurring pattern can best be described by using circular models as proposed by Rycroft (1967). The song *Ssematimba* can then be illustrated as follows:-

![Diagram showing the structure of *Ssematimba*]

marks on the circle indicate the clap pulse

This particular structure is bi-partite – a structure which is further subdivided if, as often happens, there are two choral responses within the cycle. Often the soloist's part overlaps into the choral phrase and some brief two-part singing is the result.

Such structures have often been described as repetitive. Certainly the choral responses are often unvaried and the general phrase lengths are preserved from cycle to cycle. The soloist's phrases are, however, only repetitive in that:

1. There are occasional repeats of the one or more key texts – which I call the "nuclear theme".

2. Many of his other texts – which may be traditionally used or which he or she may improvise during performance – bear a close but by no means exact relationship to the pattern of the nuclear theme. In fact, in the best performances the listeners who follow and understand the singer's words are not conscious of repetition as such, though by appreciating it subconsciously they allow the basic moral of the song continually to make its effect.

Nuclear themes, together with the repeated choral response and the general melodic similarity of other solo phrases, give each song its identity. There is ample room for research into the skill which a good singer uses when choosing words that carry and develop his message, yet, at the same time, fit into the general rhythmo-melodic framework of the nuclear theme. Three nuclear "lines" from the song *'Ssematimba ne Kikwabanga'* deserve comment. Most Ganda know the song and many can sing at least the three following lines:-
Not only are these lines melodically similar but they convey at the same time the essence of the song. They have become proverbial statements which moralise on the fate of two Ganda princes killed in battle during one of the many wars of Kabaka Ssuna's reign (circa 1832-57). When, however, a professional singer such as those attached to the former royal court takes up the song, he will develop these ideas over a period of several minutes and each performance he gives is different and contains both formulaic and informal improvisation. The former type of improvisation stays very closely within the melodic and rhythmic framework of the nuclear theme and only minor adjustments are made, as in the above example, to meet the differing tonal and rhythmic demands of word patterns. For the more informal type, however, the singer selects a ‘guide’ note of fairly high pitch – but one related to the tonality of the song – on which to carry his words. He intones his words at this pitch, occasionally dropping in pitch for syllables with low tone – so that one gets the impression of a recitative-like two-note melody. This, I have noticed, occurs more frequently when instruments present, such as flutes, are repeatedly outlining the nuclear theme and so are freeing the soloist of any need to preserve that pattern. If he overlaps into the chorus part he submits the ‘guide’ note of the choral phrase to the same type of treatment.

I have described very briefly some of the characteristics of such Ganda bardic songs as are sung and played by former royal ensembles, harpists, fiddlers and other present-day groups. Even an incomplete description will aid comparison with any instrumental versions and help one to deduce the possible processes that produce these versions.

From this very general introduction we can see how flutists fit into the musical scene. They can, when a good singer is present, complement his performance by delineating the vocal theme and the choral response – so freeing the singer to present and develop his own texts. In doing so they continually remind the Ganda listener of the kernel of the song while the soloist develops his themes. Played without the singer they can suggest texts to their listeners and remind them of different well-known lines of the songs. With any of these performances dancing may or may not take place.

The notes that follow are designed to be read as a commentary on the sound text, combining to illustrate in some detail both the general features of musical style I have been discussing and the instrumental techniques of the flutists.
PART 2
NOTES ON THE SOUND TEXT

ITEM 1  SSEMATIMBA NE KIKWABANGA (Ssematimba and Kikwabanga)  Historical song.

Performers: - The Kabaka’s Royal Flute Band. Nine or more flutes of varying size. Four drums. (On this special occasion – the official birthday of Muteesa II – the group residing in the palace during that particular month, who usually comprised an ensemble of six flutes and four drums, was temporarily augmented by players from other village groups. Recorded in the royal palace (Lubiri), November 1965. Tape PCUG64-8.5.A5.

http://sounds.bl.uk/World-and-traditional-music/Peter-Cooke-Uganda/025M-C0023X0003XX-1300V0

COMMENTS

“Somewhat like that of the fiddle, the flute’s melody comes out not in a steadily flowing stream of sounds, but in a sprinkling shower of tonal drops, due to the peculiar Ganda fingering and harmonization, whose main secret is the interlocking of counter rhythms or counter melodies... The Ganda flutist employs free harmonies for solo and fixed harmonies for duets, trios, quartets and quintets. The quintet has to be accompanied by a certain number of certain types of drums, the solo voice, a chorus and a solo dance. Unquestionably the effect is ethereal.”

This was how Joseph Kyagambiddwa (1956, p.111), a Ganda composer-teacher, summed up his impression of the flute band. Though the remarks are picturesque and open to misunderstanding (for instance, his terms “free” and “fixed” harmonies are never explained) they are worth quoting as the comments of one of the very few Ugandans who have published anything about their indigenous music. Most of the ingredients Kyagambiddwa mentions are present in this performance. The solo singer, who as usual also beats the long drum (ngalabi), is in evidence, though in this item his excitement is conveyed more by his drumming than by his singing. Other examples of royal music suggest that as melodic parts have developed in complexity through the passage of time at the hands of instrumentalists, so the vocal parts have diminished in importance. Probably the only exception to this is the harpist (omulanga) while, in the case of the two xylophones, the volume of sound produced by each is sufficient to drown any singer. However, since the flutes are, in effect, “talking” to the listeners in the sense that they are conveying the tonal outlines of well-known phrases from the song, perhaps the need for a solo singer is less pressing.

To return to Kyamgambiddwa’s description – no-one danced on this occasion. To do that might have required onlookers – the Kabaka himself, say. On most normal occasions in recent years the flutes have been meant to be heard rather than seen, so dancing has become a purely optional feature. In this item the choral refrain was provided by the drummers only occasionally. As always, the flutes began and ended the song unaccompanied. There are so many playing that the effect is apparently more heterophonic than harmonic, as each player contributes his own seemingly embroidered version of the theme.

Kyagambiddwa is vague about drums. It has, in fact, been the custom to use four drums with this ensemble and this is probably the best place to deal with them, since in so many of the examples that follow the complete drum ensemble is not present. The rhythm of each drum fits into the regular handclap framework discussed earlier. The largest drum, mpunyi, underlines this clap with a deep
regular thud. The next largest, itself named *baakisimba*, sounds the characteristic melodic/rhythmic formula of the *baakisimba* dance. The smallest of the three Uganda drums is called *nankasa* and is beaten with sticks. This drum gives its name to the *nankasa* dance, a somewhat recent modification of the *baakisimba* dance and, like the fourth drum, *ngalabi*, is free to be beaten to a variety of rhythmic patterns within the general framework. The *ngalabi* is played by the singer. It is a tall drum (approximately 4 ft.) with a single skin of monitor lizard (*enswaswa*) nailed on the top end. (See plates) The relationship of these various drum parts to each other has not been fully investigated, but it would seem that:-

1. Each drum has a distinct part to play in the complete sound picture and I have observed skilful *baakisimba* players, when playing solo, working into their own basic pattern the sounds usually provided by the other drums.

2. Some of these may again be attempts to imitate speech. The *baakisimba* part itself is verbalized by players with the phrase:-

   whose rhythmic and tonal outline is identical with the sound beaten.

3. The *ebisoko* effects referred to in the following example are possibly inspired by other word patterns.

   Basic rhythm patterns used in the *baakisimba* dance
ITEM 2  SSEMATIMBA NE KIKWABANGA (basic vocal part with handclaps)

Performer  Livingstone Musisi, former member of the royal entenga ensemble (tuned drum chime).
Recorded at the National Teachers' College, Kyambogo, January 1968.
Tape PCUG64-8.49.A7.

http://sounds.bl.uk/World-and-traditional-music/Peter-Cooke-Uganda/025M-C0023X0030XX-0700V0

COMMENTS

This item illustrates the nuclear themes of the song performed by the flutes in Item 1. The three most important lines of this song were quoted and discussed in the previous chapter (see p. 28) and it is probably these lines that the flutists have in mind when they contribute their own parts as in Item 1. The hand clap is important for, as I mentioned earlier, it underlies the structure of this type of song whether or not the participants actually do provide a clap. It is this pulse that relates the two seemingly very different rhythmic patterns – those of the voice and the drums.

ITEM 3  KU NSIKO YANGE  (In my rough land)   Historical song.

Performer  B. Busuulwa  Recorded at National Teachers’ College.
Tape PCUIG64-8.49.A16
http://sounds.bl.uk/World-and-traditional-music/Peter-Cooke-Uganda/025M-C0023X0030XX-1600V0

COMMENTS

The key texts of a different song are presented. Notice the slight variants from one line to the next – variations that reflect the different tonal and rhythmic patterns of the words:-

Ku nsiko yange kuliko Nabanteta
Ku nsiko yange kuliko Nabengere
Ku nsiko yange kuliko ensolo enene         etc.

In my rough land (‘bush’ or jungle) is Nabanteta
“ “ “ “ is Nabengere
“ “ “ “ is a large animal (= a lion = the king)   etc.
ITEM 4  KU NSIKO YANGE

Performers  Sensamba (vocalist and long drum) and Busuulwa (ensaasi flute) both former members of the royal flute band. Extracts from a demonstration of singing and ngalabi playing given by Sensamba to a group of Primary teacher-musicians, who add the choral response and other drum parts. Recorded at the National Teachers’ College, Kyambogo, March 1966. Tape PCUG64-8.48.A21.  
http://sounds.bl.uk/World-and-traditional-music/Peter-Cooke-Uganda/025M-C0023X0029XX-2100V0

**COMMENTS**

In this item the singer illustrates his recitative art at its best. At the same time, the complementary nature of the flute part is highlighted. Several points should be noticed:-
1. General character of the flute part – short, soothly-played phrases with little apparent use of the
tongue but with much use of “cuttings” (rapidly flicked subsidiary notes that separate main melody
notes having the same pitch. This technique has parallels elsewhere in the world, of course, notably
with bagpipe players who are forced to use ‘graces’ and ‘cuttings’ to break up the continuous stream
of sound that the chanter produces when played). The ‘cuttings’ perhaps provide consonantal ingre-
dients in the flute’s stream of sound while at the same time they embellish the melody.

2. The flutist continually produces a recognisable version of the key texts sung in Item 3. The singer
is consequently free to declaim his words in the intonatory manner described on page 42. Occasion-
ally the singer himself returns to the nuclear theme with the words “Ku nsiko…!” and evokes the ap-
propriate responses from other singers – or from the flute.

3. The latter illustrates the considerable rapport between flutist and singer. Apart from answering as
the voice breaks off, the flutist occasionally imitates the sound of the reciting voice, using the same
‘guide’ note (but an octave or two higher of course).

4. With regard to the extract of the flute’s part (transcribed above for further analysis) and compared
with the nuclear vocal theme, notice:-
(a) Free use of octave transpositions of phrases or even individual notes by the flautist.
(b) That the cuttings (which I shall call ancillary notes) are usually a fourth below or a fifth above the
melody note that follows – except where the embellishment takes the form of a simple trill

E.g. Yange

(c) The frequent use of these intervals (fourth or fifth) when ancillary notes are employed for Kuliko:-

5. It was easier to transcribe this item at the pitch I have heard it rather than at the average piches
postulated in the earlier section on intonation. I hope other listeners will ‘hear’ the same larger
intervals that I do, i.e. minor thirds between notes written as G and B flat and C – E flat. Note,
however, that the interval E flat – G, shown as a major third, really sounds very close to a perfect
fourth. A key to devices used in this and other transcriptions is given below:-

- = notes sounded but too short to be given a time value
- = notes which are fingered but have no time to sound
\( \underline{\text{\textbullet}} \) = the second note is aided with a push from the diaphragm
\( \mathbb{L} \) = note marked by the right hand 3rd finger striking near the bottom of
the flute
\( \mathbb{t} \) = notes separated by a subtle action of the tongue, somewhat akin to
the action needed to say ‘f’ and ‘r’ quickly.

Bar lines are omitted; they would infer a metrical stress that does not exist. Guide lines help the eye
to relate notes to the clap pulse.
ITEM 5       KU NSIKO YANGE   (in a different muko)
Performer     B. Busuulwa (ekiwuwe flute)

Tape No. PCUG64-8.35.A8 (fourth of six versions)
http://sounds.bl.uk/World-and-traditional-music/Peter-Cooke-Uganda/025M-C0023X0026XX-0800V0

COMMENTS

This item illustrates the phenomenon known as 'muko' (plural 'emiko') a concept previously discussed by Kyagambiddwa (1956, p.107), Wachsmann (1965, p.589) and others. It arises from the possibility of transposing melodies up or down in pitch on instruments that have restricted range or, in the case of xylophones, restricted playing areas that cause the player to make octave transpositions of notes in the melody that would normally fall outside the range of the instrument or the playing area (the term used is okusulika = to turn upside down). A harpist will choose a pitch that suits his voice for each song and make octave transpositions where needed of any note that is too high or too low for his eight-stringed instrument. As a result, the character of the ostinato-like accompaniment changes considerably, though the song is the same. Similarly, on the xylophones the individual parts played by each player might change considerably because of octave transpositions. However, since each part is duplicated over two or three octaves, the melody can be heard transposed but otherwise unchanged within the total pattern of sound. The nearest parallel in western music is the practice of boys with changing voices who shift up or down an octave as is convenient but, since they may be singing in monophony with trebles and baritones, their melodic shifts are not obvious.

Flute melodies incorporate octave transpositions with ease and, as will be noticed in this excerpt, it is sometimes difficult to tell which octave the flute is using. They also include different ancillary notes that are convenient and easily played in one muko but not in another. This melody is
at first barely recognisable as being basically the same as the previous one. However, there is an important similarity in that ancillary notes still tend to be a fourth (or reciprocal fifth) away from the melody notes they precede. When played in ensemble, one flute part would blend in with another and octave transpositions would become less noticeable, though some heterophony results.

Finally, the expert does not seem to worry which muko is chosen, though he will have his own preference depending on which size flute he is playing at the time. Usually the least experienced player leads the song and the others adopt whatever muko he has chosen.

Again, it is transcribed as I hear it. This time the pitches are very close to the pitches given in table 4 except that on this particular ekiwuuwe flute C –47 is really C –70 or thereabouts, so I write it as B .

ITEM 6 SSINGA MBUUSE (If I had feathers) Historical song
Performer B. Busuulwa

Tape no. PCUG64-8.49.A10
http://sounds.bl.uk/World-and-traditional-music/Peter-Cooke-Uganda/025M-C0023X0030XX-1000V0
This is another popular song that features in the repertoire of most of the different royal ensembles. According to Kaggwa, it was composed during the reign of Ssuna when “many people became concerned about death” (Mandelbaum Edel, 1934, p. 143)

**TRANSLATION**

<table>
<thead>
<tr>
<th>Chorus</th>
<th>Solo</th>
</tr>
</thead>
<tbody>
<tr>
<td>If I had flown away,</td>
<td>My elders have perished</td>
</tr>
<tr>
<td>If I had feathers,</td>
<td>I should have gone to Ndawula</td>
</tr>
<tr>
<td>If I could have flown:</td>
<td>Truly, they have perished</td>
</tr>
<tr>
<td></td>
<td>I should have gone to the child</td>
</tr>
<tr>
<td></td>
<td>What took him to the child?</td>
</tr>
<tr>
<td></td>
<td>Truly, it was because of meat.</td>
</tr>
</tbody>
</table>

This song has an eight clap cycle with repetition within the chorus part. Some performers sing the song beginning thus:

![Chord diagram]

Both versions will be found in the flute versions that follow. To aid comparison with the flutes, this item is transposed up approximately one ninth. I have also added a number notation for comparison with xylophone transcriptions quoted later: $D = 1$ etc

**ITEMS 7 a, b, c, d, e, f.  ‘SSINGA MBUUSE’**

Performer B. Busuulwa playing in turn on the following flutes:-

*Entabitabi, Ensaasi, Entengezzi, Ekiwuwe, Enkologi* and *Akatemyo*.

Tape No.
PCUG64-8.35.A1
http://sounds.bl.uk/World-and-traditional-music/Peter-Cooke-Uganda/025M-C0023X0026XX-0100V0

**COMMENTS**

Just as playing a song in different *emiko* on the same flute means employing different finger patterns, so playing the same song at the same pitch on different size flutes in turn also involves using different finger patterns. These six performances of the same song in the same *muko* are transcribed to aid examination of the similarities and differences that result. In some places I have added a number notation so that these phrases can later be compared with corresponding phrases played on xylophones by members of the royal ensemble. I have used the same tablature throughout (as for Item 5) even though some flutes with differing intonation will not seem to agree with the pitches chosen. I have also added the ‘nuclear theme’ of the song at the top of each to aid comparison with the flute cycles.
As in all the other versions, the flutist constantly varies his line despite the fact that in this song the choral response (which does not vary much) is a fairly long one and the soloist’s sections fairly brief. Naturally, one finds rather more melodic variation in the sections usually taken by the soloist and he may have different texts in mind at these points.

Line 5 is the variant which Busuulwa usually teaches first to beginners. By line 6, however, he is elaborating the basic line considerably.
We see the same process of elaboration at work here and in those that follow.

(a) Where 2 quavers descend by step they are often separated by an ancillary note a fourth lower (or reciprocal fifth higher) than the second note, e.g. line 5, clap 1, A–D–G, as in the earlier song.

(b) Long notes or repeated notes often incorporate a low fourth as a separating note, e.g. line 4, clap 2 and 8, B–G–B. Less frequently, but where the fingering is more convenient or for the sake of repetition of a pattern inherent in the vocal part, the separating note is sometimes a tone lower, e.g. line 5, clap 3 and 4.

(c) Some repeated notes occur on a clap pulse; others half way between clap pulses (a point sometimes designated the sub-clap). The diaphragm is often used here to add rhythmic impetus to exaggerate the hemiola effect, e.g. line 5, clap 6.
1. Note here another stage further in elaboration which is the use of upper and lower auxiliaries, e.g. line 1, clap 1; line 8, clap 4. They are probably played more for sheer physical pleasure than for adding anything to the clarity of the text – as if the flutist is nearly carried away with joy of rapid fingerings.

2. Still, although a different fingering is called for as he changes from one flute to another, a consistent musical pattern of elaboration is preserved. Two B’s are still separated by G, a ‘fourth’ lower, for instance.

3. There appears a new theme at [b] (line 5, clap 5) which may be derived from the other way of singing the opening phrase “Ssinga mbuuse” E-G-G-E (the first G not being sounded but a separating D being inserted as if it were there). It is used in both following lines 6 and 7 before the player reverts to the original theme in the final line 8.
1. Slight changes are apparent in this *Ekiwuuwe* version. The note A is frequently used as an ancillary note, achieved often simply by lifting the top finger. The B-G-B pattern is difficult to play (B being played with all fingers on) but B-A-B (clap 8, lines 3, 6 etc.) is easy (by raising index fingers of both hands).

2. The new theme [ ‘b’ ] appears again, sometimes with the first of the two G’s also included (e.g. line 7, clap 1.)
It is no easy matter laying all fingers on the enkologi to cover its holes, yet it is surprising how well players like Mr. Busuulwa managed to play the instrument – as in this example. There is a tendency, in this example at least, to set up certain passages and use them in an ostinato manner while still preserving the underlying melodic framework. Because more breath is required, phrases tend to be shorter and more rhythmic and diaphragm pulses are used frequently. Theme ['b'] (discussed earlier) is the basis for most of this version (after one and a half lines) and one sees the E-D-E motif of clap 1 repeated in clap 5 and slightly modified in clap 3-4 (E-D-A) and clap 7-8 (E-E-E) to give an ostinato effect.

This technique is closely paralleled in other instrumental styles, notably those of the xylophone and harp. Although the new theme has grown out of the notes of the song the player, by subtly emphasizing certain notes within the overall pattern, brings out new ideas which loom up and capture the attention of the listener. Kubik's writings on Kiganda xylophone and harp music (see bibliography) are often concerned with this technique for which he invented the term “inherent rhythms"
This flute calls for exactly the same fingering as for *enkologi* so, as one might expect, this version is very similar to the previous one in general structure. However, the E-D-E motif employed in the *enkologi* version is used even more frequently here and the original nuclear theme vanishes amid a welter of notes as the new motif is developed. The flutists themselves say that *akatemyo*’s part must be different from the lower parts. I suspect strongly that the akatemyo part is really an imitation of the high intoning style of delivery used by solo singers when others are presenting the melodic tune for them (discussed previously on page 42), and that Busuulwa’s *akatemyo* playing is not so typical, for there is not as much contrast between this and the *enkologi* or any other part.

In line 5, clap 5 and 6, Busuulwa’s memory temporarily lapses and when he picks up his theme again, clap 7, his outline theme has been delayed two claps. I have inserted words to guide the listener here. This shifting of the cycle would probably not have happened if he had been playing in ensemble with others.
General comments on item 7

These six examples illustrate well Busuulwa’s great skill as a flutist and his excellent memory. I possess recordings of 30 other songs which he made for me in similar manner (playing on each flute in turn) during a couple of evenings in his own home. Not all the royal flutists had his fine technique, though he admits readily that his own teacher and several others in other villages could command the same large repertoire and technique.

His playing also underlines another important principle in African music – that exact repetition is uninteresting and is to be avoided. Each line played differs from others with a subtlety that is only found in societies where musical intellect is concentrated on giving maximum expressiveness and interest to the single melodic line rather than dissipated in other fields such as manipulation of harmony, musical literacy, etc.

I must remove, too, any impression that this embellishment and variety is the product of change. Busuulwa found the idea of free improvisation on the flute (as when I first tried to imitate Baganda flutists) a laughable one. Each different “embellishment” was taught slowly to me and with great care. One was not allowed to move on to the next until each was given a secure and polished rendering. He maintained, too, that this was how he was taught.

These items represent individual performances on a particular occasion and they are not norms and a montage of all six (which proved impossible to manufacture successfully) would certainly not produce the equivalent of six flutists giving a performance. Baganda musicians are very conscious of the fact that they are a team and they consistently complement each other rather than compete. Two or more flutists would rarely play in unison. Busuulwa often said that when one plays low, the other must play high and, where possible, choose different embellishments from the number that are possible.

It remains only to illustrate these principles of ensemble playing with a further example and also to enquire further whether the fund or ‘bank’ of tones used in embellishments belongs to the flutes alone or if other instruments playing the same song will draw on the same fund and rules for its use.
ITEM 8

**SSINGA MBUUSE**  Flute duet

Performers  B. Busuulwa and Bulasio Katikamu (his old teacher) on ensaasi and enkologi respectively

Tape No. PCUG64-8.5.B8

http://sounds.bl.uk/World-and-traditional-music/Peter-Cooke-Uganda/025M-C0023X0003XX-3600V0
This is an example of how two parts fit together in ensemble. Where the range permits the instruments are sounded in octaves rather than unison. There are numerous heterophonic effects but most are explainable by the fact that each part is still delineating the melodic outline and embellishing it in a logical rather than haphazard manner. Notice how the stream of sound is maintained by the players, who avoid taking breaths at the same time when this is possible. Mr. Busuulwa’s part is rather less ornate on the whole than his master’s, not because he cannot equal the other in embellishment but probably out of deference to his elder. For most of the time he is content to keep the melody flowing while the older man plays with short, more rhythmic phrases. The result is a chain of flowing sound that is, at the same time, vital and dancing with energy. Often, too, Mr. Katikamu’s phrases divide the clap pulse into two, a pattern which is set rhythmically against his pupil’s three. In fact, many of his variants compare closely with those played by Mr. Busuulwa on enkologi in the previous item (7e). For ease of comparison, it is transcribed at the same pitch as the previous item.

Not all the notes are transcribed as sometimes it was not possible to distinguish individual parts because of the way the recording was made – when the microphone was moved close to one flute and away from the other.
ITEM 9. **SSINGA MBUUSE**

Performers: A "Kiganda" orchestra, composed of members of the National Ensemble (the Uganda’s national troupe of dancers and musicians). Instruments include a set of *obulere* (Kisoga pan-pipes), a *mulere* (Kisoga flute, similar to a Kiganda *ndere*), two *endongo* (lyres), an *ndingidi* (tube fiddle), *embaire* xylophone and drums.

Tape no. PCUG64-8.16.A2
http://sounds.bl.uk/World-and-traditional-music/Peter-Cooke-Uganda/025M-C0023X0003XX-3600V0

**COMMENTS**

Ganda and Soga performers predominate in this ethnically mixed group. Soga music is very similar in some respects to Ganda music, which is why the Soga musicians readily learn to perform Ganda songs under the instruction of Mr. Evaristo Muyinda (*endongo*), the leading Ganda musician. At the same time, the stylistic differences between the playing of the Soga flutist and Ganda flutists is highlighted in this recording. The composition of this brilliant ensemble is not based on traditional practice but rather on the idea of the western orchestra. Muyinda was its innovator. A transcription of this performance would produce evidence that the Kiganda flute styles previously discussed are based on similar composition principles as those of other Ganda instruments heard here. Though the xylophone is played by Kisoga musicians in their embaire style, the resultant notes are almost identical to the notes of a Kiganda xylophone version (the *akadinda* instrument) which I quote below. I also give, for comparison, the corresponding passages extracted from the previous transcriptions of the flute versions.

The *akadinda* transcription needs some explanation. The instrument is played by up to five performers, two of which sit along one side of the large instrument facing the three who sit on the other side. The two play the *okunaga* part, each in octaves – a simple, metronomically regular theme sounded every three syllabic units. The others play the *okwawula* part, a series of two-note motifs (one note to each hand) that fit in perfectly between the other part, interlocking to produce a continuous stream of pulses that match exactly the stream of syllabic units in any song. It is best illustrated as follows:-

Clap               etc.
Okunaga          etc.
Resultant rhythm stream
Okwawula         etc.

The whole process has been described by several writers, notably Kubik, and it is his number transcription that I use (Kubik, 1969, p.67, No.74).

The xylophone keys are numbered pentatonically in ascending order for this purpose. (I have given the flute passages numbers that correspond – the passages are quoted from the preceding transcriptions). The *embaire* in the recording is played in slightly a different manner to produce approximately the same stream of notes, but the method need not concern us here.
Examination of Kiganda royal xylophone music has shown that each ‘long’ syllable in a vocal melody is rarely represented by two notes of the same pitch in the xylophone parts (Cooke, 1970). Quite often the second mora of a long syllable consists of an ancillary note which is a fourth lower, or a fifth higher, than the succeeding note. It is perhaps this simple consonantal (i.e. harmonic) relationship that makes the note less obtrusive for it is then perceived as a momentary interruption in the auditory stream. The ancillary notes may represent voiceless consonants or the different timbre of syllabic nasals as in ‘ssi-n-ga’. In actual fact, were there available a recording of an amadinda version of this song, the parallel with the flute notes would be even more striking for there are certain performing problems in the okwawula part of akadinda style which prevent the fullest realisation of the intended sound. One can see, however, that the flutists are drawing basically from the same ‘fund’ of tones that are inherent in the musico-phonological structure of the nuclear theme.

Since the xylophone style has been closely compared with the harpist’s style (tradition has it that the xylophones took over the harpist’s repertoire) and since tube-fiddle style is also closely related (Kubik, 1969), one can only conclude that the same fund of notes – comparable perhaps to a “lexical entry” – is drawn on for all Kiganda instrumental styles though the flutists possibly have greater rhythmic freedom when using it than the other players who tend to maintain by regular physical movement a steady stream of notes corresponding exactly to the flow of syllabic units in song.
CONCLUSION

The Kiganda ndere is a well-proportioned pentatonic flute made from a reed (phragmites) which grows abundantly in the many swamps of central Uganda. Simply constructed, with restrained but functional applied-decoration, it is capable of subtle expression and brilliant technical execution. The pitch and size of different endere is not standardised except in the case of flutes used in the former royal ensembles where six different sizes are found – each related in pitch and length to the others.

In common with other Kiganda instruments, its repertoire is based on the songs of the Baganda people whose melodies can usually be perceived in the flutists’ versions. In the hands of experts these melodies are richly embellished in a way that simultaneously communicates verbal texts and musical pleasure to the Muganda listener.

I have tried to show that common principles of instrumentalisation of song melodies underly the playing styles of a number of Kiganda instruments, including the flute family, and to suggest that these principles are linked to the underlying phonological structure of the language. This has been in the nature of a preliminary examination but enough evidence has appeared to make a deeper study on these lines worthwhile.

Various reasons prevented me from collecting data over a wider field and this paper has relied heavily on one informant in particular. I am satisfied that he is an authentic and accomplished representative of this tradition and comparison with published data on other instruments has only added to my confidence in him. Criticism could be more justly levelled at the sound text. Only items 1 and 4 were performed in a nearly normal social context. The others were a result of meetings between researcher and informants. Useful as they were for introductory studies of this kind, one could not deduce norms from them. Further collection of data (on film and tape) in less artificial situations would be needed before we could establish norms and deduce the parameters within which the musicians operate.

The ndere has had a long and glorious past as an instrument favoured by the Baganda kings as well as an important place in the social music-making of the common people. The flutists who played in the royal ensembles evolved advanced techniques which, to this writer at least, makes the music produced by most European professional flautists sound somewhat unsubtle by comparison. The future for this family of flutes may be less promising. What place a simple pentatonic instrument will have within a society now unavoidably receiving strong influences from western European culture remains to be seen. The study of acculturation is always fascinating, if sometimes depressing.
BIBLIOGRAPHY


Fallers, M.C. 1960 The Eastern Lacustrine Bantu, Ethnographic Survey of Africa (East Central Africa0, Part XI. International African Institute, London


Kaggwa, Sir Apolo See Mandelbaum Edel


Kollman P. 1899, The Victoria Nyanza, Swan Sonnenschein


1961, Musikgestaltung in Afrika, Neues Afrika, Heft 5


1968 Mehrstimmigkeit und Tonsysteme in Zentral und Ostafrika, Osterreichische Akademie der Wissenschaften, Sitzungsberichte, 254, Band 4, Vienna


Kyagambiddwa J. 1956 African Music from the Source of the Nile

Atlantic Press, London

Mandelbaum Edel, M. ed. 1934 The Customs of the Baganda by Sir Apolo Kaggwa.

Mantle Hood 1966 Music of the venerable dark cloud: introduction, commentary and analyses, University of California.


The History and Organisation of Music in West Africa,


Post 1970


2003 *The King’s Musicians - Royalist Music of Buganda* - Uganda. CD with booklet - Topic TSCD925 .

Showing the position of the former kingdom of Buganda and neighbouring tribal areas.
APPENDIX II

FLUTE MELODY

Collected from a boy in Mwenge County, Buganda.

APPENDIX III

A MUGANDA FLUTE PLAYER

See p. 9 above.

APPENDIX IV

SONAGRAM OF A SHORT MELODY PLAYED ON A WIRE DECORATED ENSAASI

Made with a Sound Spectograph in the Department of Linguistics, University of Edinburgh.
INDEX OF PLATES

Plate

1 Kabarega’s tomb and regalia, near Hoima, Bunyoro
2 Members of the former royal horn band of the Omukama of Bunyoro
3 The Abalere ba Kabaka
4 An ndere player
5 A set of six endere
6 Endere mouth-holes
7 Ekiwuwe
8 Trimming and cleaning ebiwuwe
9 The flutes after “cooking”
10 A flute and drum ensemble
11 A small ensemble
12 A baakisimba dance study (1)
13 A baakisimba dance study (2)
14 Baakisimba drumming
15 Soga flutists
16 An embaire xylophone
King Kabarega of Bunyoro died half a century ago. The regalia includes the drums that symbolise his royal power and are still carefully guarded (1968).

Photographed performing at the Hoima Trades Fair, 1968. Though their former king was recently deposed and pensioned off, these players still meet (see page 12
Some of the members of the royal ensemble of flutes and drums which played in the palace on the official birthday of Muteesa II, November 1965. Mr. Busuulwa is second from the left; Ssensamba is carrying the long drum (*ngalabi*). The *baakisimba* drum is also shown (the latter is a typical example of the “Uganda” type drum). The usual uniform was a white flowing kanzu with a belt carrying the Kabaka’s emblem. (Many of the players here were just about to leave the palace and go home – hence jackets and raincoats on some).

Mr. Bulasio Katikamu at his home in Katikamu village. He was one of the most proficient members of the Kabaka’s ensemble and teacher of Mr. Busuulwa.
PLATE 5. A set of six *ndere*

Made by Bulasio Busuulwa, 1965.

PLATE 6. *Endere* mouth-holes
These *ebiwwue* have been freshly collected from a swamp.

When this has been done the *ebiwwue* are then dried in the sun.
Mr Busuulwa is plugging the scars left where the leaf spikes once grew. Other flutes are still wrapped in their banana leaves in the cooking pot where they have been steamed with the mouth-piece unwrapped pointing downwards.

Pupils of Mr. Busuulwa at the National Teachers’ College. The drums from left to right are ngalabi, baakisimba, mpunyi and nankasa (the smallest, which is stick-beaten). Notice also the hand-clapping chorus.
PLATE 11. A small ensemble

Mr Busuulwa (centre) and some of his pupils at the National Teachers’ College.

PLATE 12. A baakisimba dance study (1)

In addition to an ensemble of four dums can be seen a part of a portable xylophone of the type used increasingly in schools as an accompaniment for baakisimba dancing. Taken at the National Teachers’ College.
PLATE 13. A *baakisimba* dance study (2)

A performance by pupils of Nabisunsa Girls School taken at the National Teachers’ College during the Uganda Music Festival, 1968. Notice the drum ensemble and the hand-clapping chorus on the right of the dancers.

PLATE 14. *Baakisimba* drumming

This illustrates some of the hand techniques. The *ngalabi* is held between the legs. Behind the *baakisimba* drum is the *mpunyi* drum which the player beats regularly with one hand only (see page 30 for discussion of the drum rhythms for *baakisimba* style).
PLATE 15.  Soga flutists

Notice the decoration of beads and goat tails. These flutes are aluminium and are played by two members of a semi-professional group, *Ongoma ya Kasaata* from Gabula County, Busoga.

PLATE 16.  An *embaire* xylophone

Taken near Kamulli township in Busoga. This is the same type of instrument as that featured in Item 9 of the sound text.
This thesis was written up after I completed my teaching work in Uganda and during my first year while attached to the University of Edinburgh’s School of Scottish Studies as senior researcher in music. There the facilities available greatly helped in the archiving, selection and study of the recordings.

During the years that followed I was unable to maintain easy contact with Ugandan colleagues and further students because of the turmoil that ensued in Uganda following the coup by Idi Amin and the subsequent rule of what is known as ‘The Second Obote Regime’. During those decades of warfare, looting, and other ills that were inflicted on the country my good friend and colleague Bulasio Busuulwa died along with numerous other musicians.

It was not until the end of hostilities in the south of Uganda in 1987 that I was able to return with the intent of further research into the state of the royal musical traditions of the former Kabaka of Buganda and to make contact with surviving royal musicians. By good chance the visit coincided with the return of the heir to the Kabaka-ship Ronald Mutebi (the son of Kabaka Muteesa 2 who had died in exile in London in 1969). Recognised as Ssabataka (the chief of the princes and heir to the Kabaka-ship), Ganda royalists (including some of the musicians) were enthusiastic about the possibility of a revival of the kingship. It was, however, not until 1993 that Mutebi was crowned Kabaka of Buganda.

In both 1992 and 1994 I made further visits to Uganda when I was able to visit the homes of former palace musicians and attempted to learn more about the number, organisation, instruments played of the musicians associated with the newly revived court of the Kabaka of Buganda. I also submitted a report on my findings to the new Kabaka Mutebi.

Little seems to have been done with regard to the unique music ensembles that once regularly performed for the king. In November 2007 in conjunction with the UK-based organisation The Commonwealth Resounds I arranged a week-long workshop in Kampala when one of the few remaining royal flutists, Ludovico Sserwanga demonstrated the making and playing of a complete set of endere and began teaching a small number of pupils, including his nephew Albert Ssempeke Junr.. The outcome of this project is not known.

In 2009 I accompanied a BBC team recording Ugandan music material for a programme in the World Routes series and we met the Kabaka who expressed his continued interest in restoring some or all of the musical traditions. In 2014 he personally wrote to me of a plan to establish a music academy in the compound of the Lubiri and quite independently of this move a project has begun (2015) at Kyambogo University music department. It is attempting to revive the repertory of the flutists (under the direction of Albert Ssempeke’s son Bisaso, the entenga ensemble (directed by Livingstone Musisi a former Lubiri musician who for years before his retirement taught and made instruments at Kyambogo) and the makondere (trumpet ensemble). The progress of these ventures deserves attention and encouragement, but above it calls for the continuing patronage of the royal institution which for centuries had fostered such highly evolved musical traditions in its court.