# XIZAMBI FRICTION-BOW MUSIC OF THE SHANGANA-TSONGA<sup>1</sup>

by

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The Shangana-Tsonga of Southern Africa are aware from their historical legends (ntumbuluku wava khale) that until the second half of the last century their homeland was exclusively within the borders of what is now called Portuguese East Africa. Many of those now outside that border can cite the district of origin of their ancestors — Magude, Caniçado, Chibute, Limpopo. Then marauding Zulu under Shaka, Zwangendaba and Soshangane (the latter gave his name to the Tsonga) caused Tsonga migration over the Lebombo hills into the northern Transvaal, where a large group now live to the north of the Pedi tribe and to the south of the Venda tribe. A frontier delimitation at Ingwavuma in the south-east placed other members of the tribe within Natal's northern border, so that their present distribution is as follows:

 Portuguese East Africa
 ...
 ...
 ...
 1,200,000 (approx.)

 Transvaal
 ...
 ...
 ...
 ...
 480,953

 Natal and Orange Free State
 ...
 ...
 ...
 25,274

To assist the reader in pronouncing Tsonga words used here, we give the following guide:

- x as 'sh' in shut
- g as 'g' in get
- c as 'ch' in church
- y as 'y' in yes
- sw as 'sw' but slightly whistled
- h always an independent aspirate, and never as in the English combinations 'th', 'sh' or 'ch'.

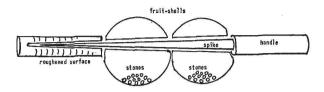
### INSTRUMENTAL MUSIC

Tsonga drums, antelope horns, leg-rattles and whistles are generally used to accompany ritual dancing within the context of two of the three ritual institutions: khomba (puberty school) and mancomane (doctor's ceremonies). Ngoma (circumcision school) is secret and therefore avoids their use. Use may occur, however, within the context of three non-ritual musical institutions: mine dances, beer-drinks and xigubu (boys' drumming school). Two other forms of musical activity — those of work songs and children's songs — rarely employ instruments.

Solo instrumental playing carries no institutional taboos and may be performed at any time. Boys play the *mbira* (hand-piano), girls and women play the *xipendana* (small, mouth-resonated bow with thick centrepiece and divided string, plucked with a safety-pin), men play the *xitiringo* (three-hole transverse flute), the *mqangala* (mouth-resonated cane bow, nylon strung and finger plucked) the *mohambi* (a 10-slat xylophone obtained from the Chopi), the *xitende* (large calabash-resonated bow with divided string, stick-struck) and the *xizambi* (friction bow). Little has been written of the *xizambi*, yet it is the bow at which the Tsonga, of all the Bantu tribes, excel the most. We shall, therefore, examine sixteen performances, involving either *xizambi*-accompanied solo song, *xizambi*-accompanied chorus, non-vocal *xizambi* duets, or voice-*xizambi* alternation.

<sup>&</sup>lt;sup>1</sup> Hereafter referred to as the Tsonga, but culturally and linguistically distinct from the Tonga (sic) of Zambia, Rhodesia and the Inhambane area of Mozambique.

The Tsonga xizambi is a 14-inch to 19-inch bow activated not by plucking or striking but by rubbing its ribbed arc (mphonwani — cut from the mphata tree, Brachylaena discolor DC) with a 14-inch rattlestick (fahlwana). The latter is of particularly interesting construction, as shown in the diagram.



Cross-section of the rattlestick.

The fruit-shell rattles shown here are the same as those worn in a cluster on the legs of girl dancers, and for this reason the rattlestick has sexual connotations. Both the  $\frac{3}{8}$ -inch spacing of the arc ribbing and the  $\frac{3}{8}$ -inch diameter of the rattlestick are critical measurements — if too thick the latter glides rather than rasps on the former, producing only weak sympathetic vibrations of the 'string'. The 'string' is a  $\frac{3}{8}$ -inch wide strip of *nala* palm leaf (Typha capensis), and in addition to its open tone it may be stopped one to four times by the fingers.

The vibrating *nala* emits the second harmonic, an octave above its inaudible fundamental. This second harmonic sounds continually, even when its frequency level is raised 200-500 cents by finger stopping. The buccal cavity, although it cannot control the continually-sounding second harmonic, adds penetrating 3rd, 4th, 5th, 6th or 7th harmonics above and simultaneously with it, the divisions in the accompanying diagram indicating by approximately how many cents finger-stopping can increase the frequency level of a given harmonic.

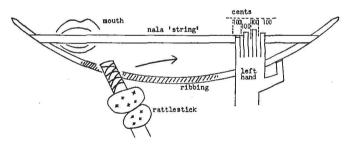


Diagram showing the xizambi being played: front view.

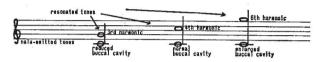
Bow tension is dictated by two factors: if the *nala* is too taut it will snap; if too slack its harmonics will be false. Thus various limitations — *nala* fragility, finger-reach, etc. — all combine to quasi-standardize xizambi pitch, and a correctly adjusted instrument generally emits the fourth harmonic (two octaves above the inaudible fundamental and one octave above the audible second harmonic) at a frequency level of between 400 and 500.

Certain players readjust the bow tension slightly for particular tunes, and others change to a smaller or larger xizambi. This does not constitute mere register selection, for the altered string-length/buccal cavity ratio favours some intervals at the expense of others — to achieve an interval of a just 3rd at the top one may intentionally sacrifice an interval of a just 4th at the bottom.

Asked to demonstrate a sustained tone, the xizambi player will oblige with a tone of any desired length, for there is no breath required. This sustained tone will emerge as a series of rhythmic pulses corresponding to the motion of the rattlestick and coinciding with the sound of the rattleseeds thereon. These rhythmic pulses contribute to the effectiveness of a performance for they may be equidistant or uneven, dynamically punctuated or unaccented, of restricted sweep or following the full arc of the bow, grouped in twos or threes and combining any of the foregoing.

The commonly used harmonic combinations are given here. Only the 'open' position (non-fingered) is shown, and it should be realised that by the use of fingering each

combination can be raised from one to four semitones.



Commonly used harmonics.

Appropriate fingering can produce the commonly used tone-row given here, and it will also be seen that by a lateral hand shift the DE fingering 4-2 can produce Eb and F.



Commonly used tone-row.

Xizambi performers are generally taught to manufacture and play the instrument during the period between when they have ceased to tend goats and not yet commenced to look after cattle. They learn by the use of rhythmic nonsense syllables such as hlawahlawa, from which the rattlestick (fahlwana) derives its name. Typical learning rhythms are as shown.



Typical xizambi learning rhythms.

A xizambi player is often the musician/composer connected with a chief's 'inner circle', and he provides music to entertain distinguished visitors. On the other hand, but less frequently, he may be a wandering minstrel (xilombe²) who makes his way from village to village, dancing, singing and playing in return for food, drink and shelter. Less frequently still, he may be a recluse (nwarimatsi³). Literally, this term means 'child-

A 'chilomba' dance was witnessed as long ago as 1670 by Dapper while visiting Loanga (Congo).
 The name Nyakamosho (from the word bumosho meaning "left side") is borne by one member of Bagyendanwa's sheegu orchestra in Uganda.

of-the-left-handed-one', but it may refer to *social* attitudes towards left- and right-hand functions. There is a Tsonga saying which runs thus:

Ku senga homu hi rimatsi

To milk a cow on the left side (wrongly)

This saying partly explains why the Tsonga allude to the left hand as the 'hand of the nfene' (monkey), and why a left-handed child is socially ostracized. The Tsonga use the right hand for offering food because the left hand is reserved for toilet needs, therefore application of the term nwarimatsi to certain recluse (but often exceptionally talented) xizambi players suggests that the latter are regarded as being beyond the societal fringe.

In Transcription 1, the xizambi part employs the tone-row we have described, and it was played by Wilson Zulu of Samarie (a headman's aide) while accompanying a group of male singers performing the song Ximanjemanje.



Transcription 1. "Ximanjemanje". Transposition: maj. 3rd up.

Ximanjemanje consists of an overlapping call and response, the 20-quaver length being derived in part from the number of syllables contained in the text, and the irregular quaver-grouping being derived in part from speech stress, as follows:

Ximānjemānje xāle ntsungēni māra hāyi āhi ku sasēka

The bow accompaniment is of interest in that occasionally either its upper or lower tones may represent the melody, and that it may move in 'contrary motion' to the melody due to the player's avoidance of weakly-audible lower harmonics.

Transcription 2 illustrates one of the uses of xizambi music, for the title of this piece — Yimbelela hosi rihuvahuva — means 'sing to the chief with praises'.



Transcription 2. "Yimbelela hosi rihuvahuva". Transposition: maj. 3rd up.

As an introduction to the above performance, Wilson Zulu used its concluding phrase. Note the interesting cross-rhythm set up by the clap.

Transcription 3 shows Wilson Zulu alternately singing and playing Javarisa. As many players do while singing, he accompanies himself with the rattlestick alone, and in addition to the sound of the voice, the seeds and the rasp, one also hears the continuously-sounding unresonated second harmonic C, produced by the open nala 'string'.



Transcription 3. "Javurisa". Transposition: maj. 3rd up.

Wilson Zulu employed the DE fingering 4-2 for the Eb's and F's of *Javurisa* (shifting his hand laterally), and his Bb is, of course, the third harmonic of his Eb. Note that the vocal melody is often instrumentally represented a 4th distant.

John Chauke of Sibasa played the next piece (Transcription 4) at Messina mine compound, and for his opening statement of the tune he struck rather than rubbed the bow, producing a novel staccato effect. After some instrumental embellishment he sang it a 4th distant, the while accompanying himself with the rattle alone.



Transcription 4. "He Mashangana". Transposition: tone down.

Chauke concludes *He Mashangana* with further instrumental development of the tune, and the resulting impression is one of perfect form and musical unity.

Transcription 5 was played in duet by Joel Mashava and Njaranjara (village elders) at Mhinga's location, and the point to be noted is that the bows were deliberately tuned a 5th apart (see lower tones of second bow — the F represents its open tone). Disparate but interlocking pairs of bow tones thus yield four-part polyphony which, together with the cross-rhythms involved, serve as an excellent example of Tsonga instrumental music.



Transcription 5. "Mfungu wa makuwa". Transposition: tone down.

Our next piece, Transcription 6, is by the same duettists, and note that the second bow enters across the penultimate dotted crotchet of the first bow, each performer's contribution lasting sixteen dotted crotchets but being staggered by five quavers.



Transcription 6. "Nsati wa rilaveta". Transposition: tone down.

Concerning the whereabouts of the 'melody' in Transcription 6, subsequent investigation revealed that the *second* performer's contribution is the true, traditional tune of *Nsati wa rilaveta*.

Transcription 7 is our final and most complex example of xizambi duet-playing. The second performer enters on the first performer's fourth quaver, and every four repetitions of the first performer's 30-quaver cycle (every five repetitions of the second performer's 24-quaver phrase) will find the juxtaposed phrases back in this position, rather like the cyclic phasing encountered in Indian drumming. Prior to performance of this particular duet, the players consulted each other and tapped out the following rhythmic pattern:

# 

This pattern consists of two sections, which because of their mixed duplet/triplet groupings, can be viewed as either six crotchets or four dotted crotchets in length. Note the irregular accentuation and the intriguing rhythmic asymmetry of these two equallengthed sections — the whole 24-quaver pattern constitutes the subjective or 'inherent' rhythm of the two xizambi contributions combined<sup>4</sup>.

Examination of the aforegoing three xizambi duets suggests that, apart from their amusing (to the Tsonga) chance consonance and dissonance, and their occasional use to create 'inherent' rhythms, the salient point of such music is its challenge to an African musician's time-sense virtuosity.

<sup>&</sup>lt;sup>4</sup> The "inherent" rhythms of Tsonga xizambi duettists, while constituting a means of arriving at a given rhythmic pattern, do not constitute a means of arriving at a given melodic pattern, as do the "inherent" rhythms of Kiganda xylophone music.

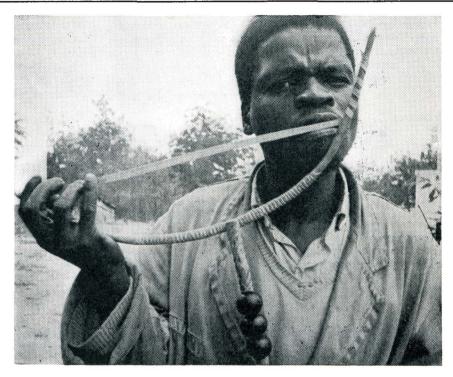


Transcription 7. "Xingomungomu". Transposition: tone down.

Transcriptions 8 to 16 were performed by Johannes Mathye of Mangove (described by villagers as a nwarimatsi), and like most of the previous transcriptions, they are of



Transcription 8. "Hlambanyo dadiwetu". Transposition (voice): dim. 5th up; (bow): maj. 3rd up.



Johannes Mathye of Mangove.

well-known Tsonga traditional songs. Mathye first sang (totally unaccompanied) and then played each tune, but we have scored his paired versions *superimposed* in order to reveal why, although Mathye is capable of instrumentally reproducing the *exact* melody and rhythm of each vocal performance, he did *not* always do so.

Mathye can, by extending his little finger or by laterally shifting his hand, play an F (he does so in four of the pieces given here), but vocal F becomes an instrumental E in order to conform to the general outline of a pre-determined descending pentatonic tone-row — GEDCA. By repeating variants of this tone-row throughout each song, Mathye's xizambi-playing unfailingly conveys its melodic essence if not always its rhythm. The descending vocal interval GD (see the second 'ngozi') may be represented by the ascending instrumental interval CA because the latter are 'harmonic equivalents' of the former, and the apparent contrary motion is occasioned by Mathye's preference for the powerful sixth harmonic A over the weakly audible third harmonic A.

Transcription 9 shows how Mathye first sings Se landze mafahlawa to a straight crotchet rhythm (the song contains nineteen crotchets) and then plays it in the following manner:

## 36 1 1 1 1 1 1 ×

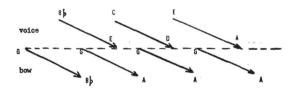
This highly interesting rhythm is also used by the neighbouring Venda in the muulu music of their vhusha initiation ceremony.

<sup>&</sup>lt;sup>5</sup> See Blacking, John, Venda Children's Songs, Witwatersrand University Press, Johannesburg, 1967, p. 168.



Transcription 9. "Se landze mafahlawa". Transposition (voice): maj. 3rd up; (bow): maj. 3rd up.

In Transcription 9, Mathye's xizambi-playing again exhibits repetition of one tonerow, but note how its 'pathogenic' descent is out of present with the 'pathogenic' descent of the melody it represents, as follows:



The Tsonga then, in addition to utilizing staggered drum rhythms in their mancomane music (heard by the present writer), utilize staggering of melodic descent in their xizambi music, though it must be remembered that the 4th, the 5th, the 8ve and the unison all hold the same meaning to Tsonga musicians, because of their relationship through 'harmonic equivalence', and 'contrary motion' in African music may therefore represent a musical concept different to that found in other cultural contexts.

Note in Transcription 10 Mathye's continued use of an instrumental tone-row containing C, although no C is to be found in the song being interpreted.



Transcription 10. "Bya bava". Transposition (voice): semitone down; (bow): maj. 3rd up.

In Transcription 10, Mathye's representation of the descending interval BF# by an ascending interval CG intrigues the ear but retains the essence of the interval concerned.

While in Transcription 11 the vocal version is divisible into four eight-crotchet melodic descents commencing with the first high E, the xizambi version is divisible into four eight-crotchet melodic descents commencing with the first high G, resulting in another example of staggered melodic descents.



Transcription 11. "Ahi si tisiwa ka ndaba". Transposition (voice): maj. 3rd up; (bow): maj. 3rd up.

Note that all vocal rests in Transcription 11 are instrumentally represented by repetitions of the previous xizambi tone — a device which resembles the use of what Gerhard Kubik calls 'fill-in notes' in the amadinda and akadinda xylophone music of Uganda.

In Transcription 12, as in 11, vocal quavers 'unite' to become instrumental crotchets, and the staggering of melodic descents occurs.



Transcription 12. "Xidavula mananga". Transposition (voice): maj. 3rd up; (bow): maj. 3rd up.

Summarizing our findings to this point, it can be stated that, in their instrumental adaptations of traditional songs, xizambi players often:

(a) raise melodic tones by one octave, in order to avoid weakly-audible lower harmonics.

(b) use, as an introduction, a song's concluding phrase (this is due to African cyclic form).

(c) represent a vocal melody instrumentally at a distance of a 4th.

(d) represent a vocal melody instrumentally by one of the two simultaneously sounded xizambi tones.

(e) represent a vocal rest instrumentally by repeating the previous xizambi tone (this is due to the continued motion of the rattlestick).

A particularly gifted xizambi player may often:

(a) interpret different songs by using the same descending instrumental tone-row, suitably manipulating it through tone-lengthening or shortening, tone-repetition or omission, and octave-transfer.

(b) represent a song's major 3rd, E, by an instrumental minor third, Eh (in much the same way that Azande harp players alter their EDCAG string tuning to EDBAG for certain tunes).

(c) arrange an instrumental adaptation so that its melodic descents 'oppose' those of the original.

(d) arrange an instrumental adaptation so that its rhythm differs from that of the

original.

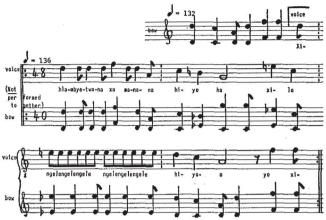
In Transcription 13, Mathye apparently commenced his instrumental adaptation of *Ntengu, Ntengula n'wananga* by playing the song's concluding phrase, but subsequent investigation showed that he had commenced his vocal version at the song's centre.



Transcription 13. "Ntengu, Ntengula n'wananga". Transposition (voice): 4th up; (bow): maj. 3rd up.

Mathye's vocal version of Ntengu, Ntengula n'wananga occupies twenty-six crotchets, but his instrumental version occupies twenty-four crotchets, and the discrepancy may be explained in part by the fact that Mathye, not only in this song, but in the following song also (Ngelengele) often reduces a vocal minim to only three quavers in the instru-

mental version. Xizambi melody is characteristically motional rather than static, and the player is therefore inclined to abbreviate unduly long tones within a traditional song.



Transcription 14. "Ngelengele". Transposition (voice): 5th up; (bow): maj. 3rd up.



Transcription 15. "Bana noti". Transposition (voice): nil; (bow): maj. 3rd up.

To point out that, in Transcription 14, the song Ngelengele proceeds through a cycle of 5ths (D minor, G major and C major) would be to assume the presence of European musical concepts where there are none<sup>6</sup>, but it does serve to emphasize the song's unusually interesting and complex melody. Note the use of reiterated vocal tones to convey a feeling of 'action' in setting the onomatopoeic word ngelengele — this is a common Tsonga musical practice.

Transcription 14 features hemiola in that it alternates four dotted crotchets with their metric equivalent of six undotted crotchets, but while Mathye's instrumental version interprets the song's melody, it ignores its rhythm — the instrumental version containing

forty quavers to the vocal version's forty-eight.

In Transcription 15 the instrumental version contains eight-plus-twelve crotchets in contrast to the vocal version's twenty-four. The versions overlap and their repeat signs are staggered, showing that Mathye did not intend *rhythmic* concurrence. A loose *melodic* concurrence was intended (much expansion and contraction of the original melody having taken place?) and we have shown this concurrence by appropriate positioning and spacing of the instrumental tones under the vocal tones they represent.

In Transcription 16, although the vocal and instrumental versions each occupy a cycle of twelve crotchets, the latter observes a distinctive rhythm of its own, as shown.

# וונות ותת ות נונת נייו

Distinctive rhythm of the instrumental version (Tr. 16).

This rhythm has nothing in common with that of the vocal version, and it is through his melodic line that Mathye, in the xizambi adaptation of Mina ndzi vona maxangu, has managed to convey the song's essence — the C-to-F plus D-to-E structure of his vocal version is represented by the C-to-F plus D-to-E structure of his instrumental version.



Transcription 16. "Mina ndzi vona maxangu."
Transposition (voice): maj. 3rd up; (bow): maj. 3rd up.

Mathye's representation of the two descending phrases terminating on low F and low E respectively by two ascending phrases terminating on high F and high Eb respectively, warrants some comment. Mathye may be aware of this 'contrary motion', for he regards high vocal tones as 'small' (xitsanana) and low vocal tones as 'big' (nkulukumba), and in order to produce high F on his xizambi he must lay all his fingers along the nala 'string' and make it 'small'. At the same time we must concede that Mathye's instrumental use of high F is due mainly to the unavailability of low F, and that to a Tsonga the meaning of tones an octave apart is the same.

<sup>&</sup>lt;sup>6</sup> Ngelengele is mentioned in studies made by Junod half a century ago. The term is an onomatopoeic construction representing the sound of a well-baked, true-ringing pot rolling along the ground. Although the song appears to refer to "mother's clay pot", it obliquely refers to a sturdy infant who has survived childbirth. Had the child been stillborn, it would have been interred in a broken clay pot.

Of music in Uganda it has been written that "the impression of stretched/compressed sections to make up amadinda and akadinda patterns is certainly relativistic and emerges from comparison. The sections of the themes appear stretched/compressed against each other". Kubik, Gerhard, "Composition Techniques in Kiganda Xylophone Music," African Music, Vol. IV, No. 3, 1969, p. 57.

#### CONCLUSION

Many of the distinctive features of xizambi music have been shown to be characteristically African, deriving from the need to be clearly audible outdoors, from the use of cyclic form, from the use of 'harmonic equivalents', and from the use of rhythmic mutation. Certain other features, such as the use of 'minor' to represent 'major', of serial technique, and of expansion/contraction, seem to be the prerogative of musical experts within the tribe.

What is certain, however, is that xizambi music (and Tsonga music in general) is an amalgam resulting from historical factors. Studies of the Tsonga made half a century ago<sup>8</sup> mention the xitende bow but not the xizambi bow, and it is possible that, like the xindau rhythm of Tsonga 'exorcism', this instrument came from the Ndau in the east.

The fact that the xidzimba rhythm of 'exorcism', certain of the khomba texts and the four-handled drum came from the north, and that the mandlogi rhythm of 'exorcism', the xizotho rhythm of the puberty school, certain songs of the circumcision school and certain of the mbira hand-pianos came from the south, suggests that musical acculturation has occurred and may be a permanent force within African music. In the case of the Tsonga, processes of musical change have accelerated within the past one hundred years, and this can be traced both to new inter-tribal contacts caused by migration and to new ecological factors such as the non-availability (for drum and instrument making) of timber and hide- and horn-yielding game.

#### GANDA XYLOPHONE MUSIC

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<sup>8</sup> Junod, Henri, Life of a South African Tribe, University Books, New York, Reprinted 1962, Vol. II. p. 278.