

Toward a Definition of the Ideophone in Bantu

Marion R. Johnson

1. The class of items known as 'ideophones' has presented a special puzzle to linguists interested in a number of African languages, including in particular the Bantu languages. Although a few theorists have attempted to deal with these items in terms of the formal features of their class (most notably, Samarin (1965, 1967, 1970, 1971) and Fortune (1962)), no definition has yet gained wide acceptance and consequently, no set of language-independent criteria has been established for the identification and investigation of ideophones. The purpose of the present paper is to propose such a definition for the grammatical class ideophone, and to indicate the directions of research which would follow from such a definition. I will support my proposal with data from the Zulu language. The primary source for phonetic information about Zulu will be Doke (1926); for morphological and syntactic information, Beuchat (1966) and Doke (1955).

Ideophones in the Bantu languages are a class of items comparable to the English word kerplop in the sentences below.

- (1) The stone went: kerplop!, into the pool.
- (2) The stone fell, kerplop!, into the pool.

In English, as in Bantu, it is freely possible to derive verbs and nouns from ideophones, to yield sentences like:

- (3) The stone kerplopped into the pool.
- (4) We heard the kerplop of the stone into the pool.

The current literature on words of this type suggests that they exhibit with remarkable consistency a number of recurrent structural features across a very diverse range of language families (cf. Welmers (1973) on African ideophones in general; Newman (1968) on Tera and Hausa; Diffloth (1972) on Korean). For example, ideophones are frequently introduced by a pause. They describe with vivid clarity and eloquence the perceptual qualities of objects and events. They demonstrate a general antipathy toward negation and question-formation. They are characterized formally by the total absence of inflection and by a freedom in their phonotactic construction not shared by any other class of items in a language. Moreover, there are restrictions on the appropriateness of ideophones in different social contexts which are peculiar to them and not to any other lexical class. For example, there is no social context in which it is appropriate to use standard English but inappropriate to use items from the categories Noun, Verb,

Infinitive, and so on. The use of ideophones, however, can be so restricted. In English, the introduction of an ideophone seems to introduce a 'diminutive' sense to a person's speaking style. As a result, ideophones are more acceptable in baby talk, children's stories, highly informal conversation, and so on, than, for example, in a scientific discourse. In other languages, including the Bantu group, where ideophones are more highly developed as a class, their occurrence is correspondingly more frequent and more general. Yet the acceptability of their use still varies with context and style. Concerning the use of ideophones in Yao, Whiteley (1966:154) has commented: 'Ideophones occur in all types of speech, particularly in folk tales, but there appears to be a personal factor in their use. Some people use them very frequently, others hardly at all, but it is my impression that women tend to use them generally more often than men'. Clearly, there is an important area for sociolinguistic research here, involving both inter- and intra-cultural variation in language attitudes and language use.

Characteristics such as those just described have made it possible for the identification of ideophones to proceed on a fairly intuitive basis. One definition that is frequently cited, however, is that presented by Clement Doke. Doke offers a basically semantic criterion for ideophones, but not one that could be applied with any systematic rigor. His definition is as follows:

An ideophone is a word, often onomatopoeic, which describes a predicative, qualificative or adverb in respect to manner, colour, sound, smell, action, state, intensity, etc. (Doke and Mofokeng (1957:337))

In a series of recent articles, Samarin has repeatedly urged Bantuists to develop a more rigorous analytical approach, based on the formal properties of this class of words. The present paper is in part a response to those urgings, because I agree with Samarin that ideophones deserve serious attention as a unique and significant grammatical phenomenon. However, I differ with his position that ideophones are specifically a morphological class, defined on a language-specific basis. The claim I want to defend is that ideophones are a lexical class characterized by the absence of morphological structure, and this absence of morphology is the primary peculiarity of the class. The unusual phonological properties of the class are a consequence of this lack of morphological structure, but not themselves a defining property of the class. My definition is as follows:

Ideophones are a class of lexical items in which semantic representation of perceptual qualities are mapped directly onto phonological strings, without passing through the morphological component of the grammar.

It is important to emphasize that the foregoing is intended as a definitional, and not a descriptive, statement. Therefore, it does not necessarily include all that has hitherto been referred to as

'ideophones'. On the contrary, this is an attempt to delimit the relevant members of the class. Note, for example, that it would include the item kerplop in sentences (1) and (2) above, but exclude the verb kerplopped in (3) and the noun kerplop in (4). My point is that the formal properties of a verb kerplop can be exhaustively described within the terms of its own category, the presence of sound symbolism being a relatively rare but by no means unacceptable feature of a verb. However, the term kerplop in (1) and (2) requires us to set up a separate grammatical category to account for its syntactic behaviour. This point is crucial, because the lack of a formal definition in the past has led to some confusion over the identification of ideophones, and this in turn has led to confusion over the properties of the class.

In the next section of this paper, I will attempt to defend the definition I have just proposed with the morphological and syntactic facts about ideophones in Zulu. I will then add some comments on the semantics of the class, and the kinds of semantic questions involved.

2. Descriptive grammars of Bantu languages have usually treated ideophones as a subcategory of adverbs. Doke adopts this approach for Zulu, treating ideophones as a more or less separate word class, but including them with adverbs in the general category 'Descriptive'. Morphological processes, however, argue against such an alignment. Derivationally, Zulu adverbs are close to nouns, whereas its ideophones are closer to verbs. The three types of simple adverb formation in Zulu (as presented in Doke (1955:118)) all involve nominal stems as the base of the derivation. In some cases, the adverb does not differ in morphological shape from the corresponding noun (it differs, of course, syntactically). For example:

- (5) izolo 'tomorrow', ubusuku<sup>1</sup> 'night', impela 'truth, truly'

In other cases, the initial vowel of the noun is absent from the adverbial form. For example:

- (6) intambana 'afternoon' vs. ntambana 'in the afternoon'  
ukuqala 'the beginning' vs. kuqala 'first, long ago'

Finally, adverbs can be derived from nouns (or adjective stems) by means of certain suffixes (e.g. -ini) or prefixes (e.g. ka-). For example:

- (7) isibaya 'the kraal' vs. esibayeni 'in the kraal'  
isihle 'goodness, benevolence' vs. kahle 'well,  
beautifully, carefully, gently'  
(cf. -hle (adj. stem) 'good, beautiful, pretty')

(The glosses above were taken from Scholar's Zulu Dictionary, not from Doke's material.)

In contrast to the above, derivational processes most often move ideophones into the grammatical category Verb (and vice versa).<sup>2</sup> When a verb is derived, either the neuter suffix (-k-) is added to mark an

intransitive verb, or the applied suffix (-l-) is used to mark a transitive one. For example (data from Voeltz (1971:149)):<sup>3</sup>

- |     |                        |         |          |
|-----|------------------------|---------|----------|
| (8) | Ideophone              | +Neuter | +Applied |
|     | petu 'turn inside out' | petuka  | petula   |
|     | khumu 'come off'       | khumuka | khumula  |

Ideophones also do not resemble adverbs in their typical syntactic environments. Adverbs occur as adjuncts of independent main verbs. The adverb specifies the manner, place, time or instrument of an activity expressed in the main verb, as in the following examples:

- (9) Bahame kahle. 'They journeyed well.'
- (10) Sifike ekuseni. 'We arrived this morning.'
- (11) Impi izohambe ngendlela enye. 'The army will travel by another route.'

In a sentence containing a verb and an adverb, it is possible for either the verb or the adverb to be the semantic focus of the assertion. Focus on the verb is marked by incorporation of the prefix -ya-; without -ya-, the adverb is understood as the focus (and the verb can cliticize to the adverb, with accompanying stress subordination). These facts give rise to minimal sentence pairs such as the following (data from Beuchat (1966:19)):

- (12) Abantwana bacula esikoleni.  
children they-sing at-school  
'The children sing at school (and nowhere else).'  
(i.e. Where the children sing is at school.)
- (13) Abantwana bayacula esikoleni.  
children they-ya-sing at-school  
'The children sing at school (among other occupations).'  
(i.e. What the children do at school is sing.)

In contrast to adverbs, ideophones co-occur with only two types of verbs: either the verb ukuthi, which Doke glosses as 'to express, to act, to demonstrate, to manifest'; or a verb whose meaning closely parallels that of the ideophone (this verb may be cognate with the ideophone; often the ideophone is more specific in meaning than the verb).<sup>4</sup> For example:

- (14) Leli-tende liyabakuza, lithi baku-baku.  
this-tent it-ya-blow-about, it-thi IDEO (tossing)  
'This tent is being blown about.'  
(lit.: This tent is blowing about, it's going:  
baku-baku.)
- (15) kumhlophe, qwa. 'It is snow white.'  
it-white, IDEO (snow white)

In sentences like (14), the focus marker -ya- is never attached to the verb -thi; the ideophone is always (for obvious reasons), the semantic focus.<sup>5</sup> On the other hand, -thi may not cliticize to the ideophone. The ideophone is always intonationally as well as



syntactically isolated. Note that in sentences like (15), the ideophone recapitulates the assertion already made by the verb, but with greater eloquence and force.

The foregoing shows convincingly that ideophones cannot be subsumed under the category Adverb. A second possibility is that ideophones belong in the morphological category Verb. This claim is made in Voeltz (1971); Voeltz argues that ideophones are a subset of the category Verb, with a feature +IDEO which is assigned on essentially phonological grounds. Voeltz's approach leads him to compare the construction with the verb ukuthi plus an ideophone with another construction in which an inflected form of ukuthi is followed by an infinitive.<sup>6</sup> Some examples of this second construction are:

(16) Sithe ukuhlala phansi. 'We just sat down a while.'  
we-thi to-sit-down a-while

(17) Umfana wathi ukubuka. 'The boy merely looked.'  
boy he-pst-thi to-look

(18) Ubuso bakhe buthi ukuqhamuka. 'Her face just appears.'  
face her it-thi to-appear

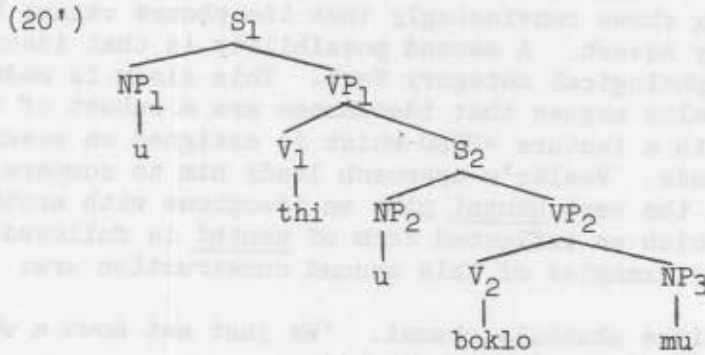
A major problem with this approach is that Voeltz does not establish that the meaning of -thi when followed by an infinitive is comparable to its meaning with an ideophone. Example sentences like those above suggest that -thi describes some restriction on the activity referred to by the infinitive (what this restriction is, I leave to another study). But this meaning is completely inappropriate to many ideophone constructions, especially when the ideophone describes some (possibly inherent) state. Compare (19) with (16)-(18).

(19) Kubomvu, kuthe klebu.<sup>7</sup> 'It is bright red.'  
it-red, it-the IDEO (bright red)

Given this difference in the semantics of the two constructions, it is not at all clear why they should be syntactically equated.

Voeltz's proposal also runs into trouble in the lack of independent motivation for the derivational rules required to generate the correct surface sentences from his underlying representations. Voeltz's deep structure analysis for the sentence given as (20) is reproduced below as (20').

(20) W-a-mu-thi boklo. (he-pst-him-thi IDEO)  
'He hit him in the back.'



(20) is derived from (20') by the operation of two rules. The first, Equi-NP Deletion, deletes NP<sub>2</sub>; and the second, 'Object Incorporation', takes NP<sub>3</sub> and (by-passing V<sub>2</sub> because it is marked with the feature +IDEO) attaches it to the next higher verb (V<sub>1</sub>).

The way in which Voeltz has Equi-NP Deletion operating in this context has no parallel in other Zulu constructions. In (20'), the rule must delete, not a full noun phrase, but a nominal concord which is normally attached to the verb. In all other double verb constructions, this concord is retained on the second verb. For example:

- (21) Abafana bake babone izinyamazane.  
 boys they-ke they-see game<sub>8</sub>  
 'The boys sometimes see game.'<sup>8</sup>

Even when an embedded verb is an infinitive, it cannot be argued that Equi-NP Deletion wipes out the subject-concord slot, since this slot is still occupied by the 'unmarked' form uku-. For example (sentence from Voeltz (1971:142)):

- (22) Abatwana bafuna ukudlala.  
 children they-want to-play.  
 'The children want to play.'

The fact that uku- rather than ba- appears as the prefix on the subordinate verb in (22) needs to be handled within a theory of concordial marking. But it seems quite implausible to suppose that Equi-NP Deletion has operated on this element at any point in the derivation of (22).

Voeltz's rule of Object Incorporation is equally ad hoc, because its application must be triggered by the feature +IDEO. This means only that +IDEO can function as a diacritic for a rule whose rationale is otherwise unexplained. In particular, this analysis, while in effect imputing inflections to ideophones at some abstract level of representation, provides no satisfactory account of the fact that these inflections cannot appear on the surface.

My claim in this paper is that these inflections are impossible because ideophones do not belong to any morphological category to which affixation processes can apply. Ideophones are semantic primes given direct phonological/phonetic realization. They can be entered directly into the logical representation of a sentence because nothing in the morphosyntactic derivation of the sentence is allowed to affect them,

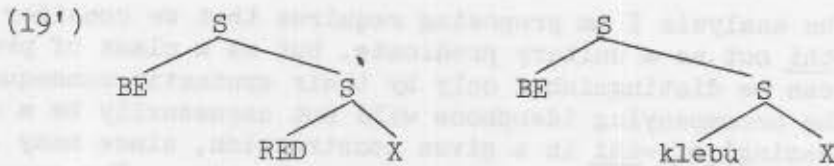
and because in some (as yet mysterious) way, the phonetic representation is the semantic representation; there is no intervening abstract semantic structure to which phonologically distinct but semantically synonymous realizations could be assigned.

The reason for short-circuiting the morphosyntax in this way is to preserve this intrinsic sound-meaning relationship with which ideophones are exclusively constructed. Lexical items which pass through the morphosyntactic component of a grammar are subject to morphophonemic alternation, to fast speech reductions, to phonetic modification based on syntactically-derived intonation, and so on--all of which tend to obscure whatever direct sound-meaning correspondence may have been present in the base form of a lexical item. According to my analysis, ideophones originate right in the logical structure, where they function as simple predicates. In most cases, the ideophone predicate will be contained in a construction destined to become a verb phrase. When lexical insertion takes place, the ideophone will find itself sharing a node with other predicates. Since ideophones are not allowed to combine morphologically with any other semantic units, the stem -thi will be used to lexicalize whatever shares the ideophone node.

An example will help to clarify my meaning. The tree representations given below are intended as approximate and simplified structures only, but they will illustrate the general point.

Ideophones can occur in a variety of constructions, including the semantic categories of states, actions, inchoative states, action-states, and so on. An example of an ideophone in a stative construction was given in (19), and is repeated below. (19') is intended to represent the underlying structure of the two parts of (19).

- (19) Ku**omvu**, kuthe klebu.  
'It is bright red.'



In (19''), Predicate Raising has applied, forming a derived structure to which lexical insertion can apply (in the manner indicated by the arrows).

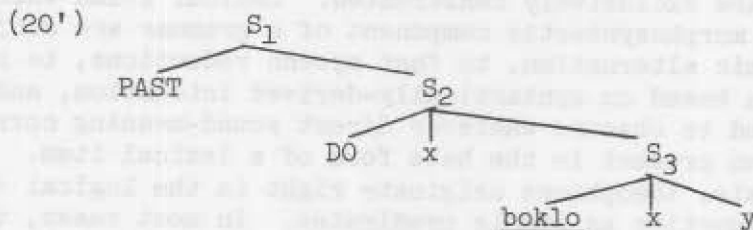


Only superficial ordering rules need apply to the derived structures in (19'') to yield the surface sentences.

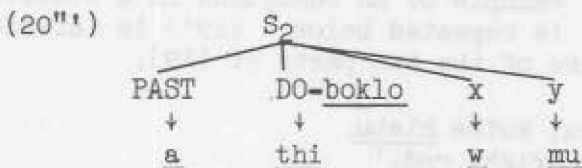
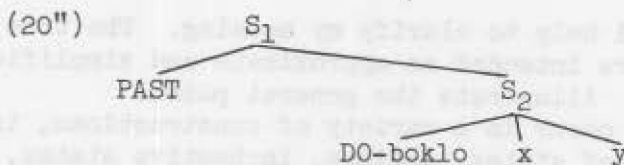
Sentence (20), which contains a transitive action construction,

would have the representation given in (20'), according to my analysis.

- (20) Wamuthi boklo.  
'He hit him in the back.'



Predicate Raising will move boklo onto the same node as DO, as shown in (20''). Then the temporal predicate PAST will be lowered into S<sub>2</sub> and the structure will be ready for lexical insertion, as shown in (20''').

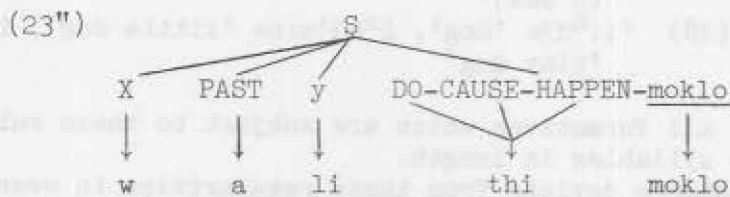
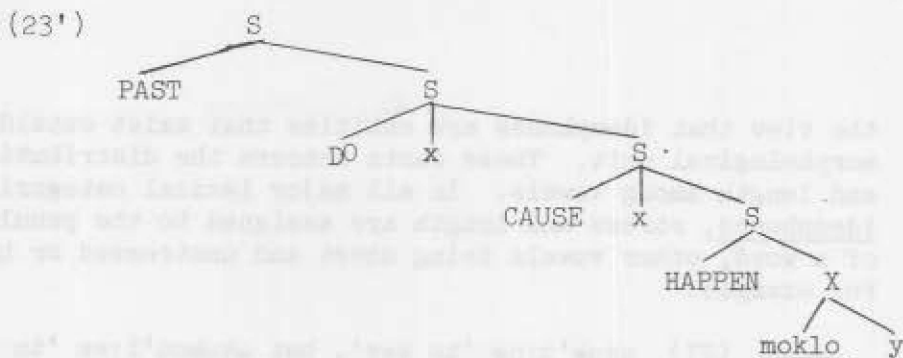


The analysis I am proposing requires that we consider the verb stem -thi not as a unitary predicate, but as a class of predicates which can be distinguished only by their syntactic consequences. Even the accompanying ideophone will not necessarily be a clue to the 'meaning' of -thi in a given construction, since many ideophones can occur in more than one type of construction. For example, bihli can occur in intransitive constructions, meaning 'to come off', and in transitive constructions, meaning 'to scrape off'. However, the syntactic fact that the transitive meaning requires an object slot on the verb phrase will always differentiate the two meanings.

The class of predicates expressed by -thi in combination with an ideophone will have to include some derived compound predicates. One such case is illustrated in (23), with its logical structure given in (23'), and its derived structure after lexical insertion given in (23'').

- (23) W-a-li-mokloza ithambo, w-a-li-thi moklo  
he-pst-it-break bone, he-pst-it-thi IDEO (breaking)  
'He broke the bone'.





The idea that -thi lexicalizes a class of predicates which can only be distinguished by their respective syntactic consequences can be paralleled by the behaviour of many other verbs. For example, the verb stem -hamba, 'to go, to travel', is normally used as an intransitive action predicate. As such, it can be inflected with the long form of the perfect suffix -ile (expressing immediate past action). For example:

- (24) Bahambile.  
'They have gone.'

When an adverb follows the verb, it is obligatory to use the short form of the perfect, -e, in place of the long form. For example:

- (25) Bahambe ngezinyawo.  
'They left on foot.'

However, it is also possible to use -hamba as an action-state predicate. In this case, there is no longer a long form/short form contrast in the perfect, but the suffix -ile is invariably used, and it describes a state entered in the immediate past and continuing in the present. For example:

- (26) Isela lihambile manje.  
thief he-go-perf now  
'The thief has left now.'

The literal meaning of (26) is: having just left, the thief is now in a state of being gone. Note that the time adverb manje eliminates the 'immediate past action' reading of (26), because it would involve a contradiction.

To conclude the present defense of my proposed definition, there are a number of morphophonemic facts about Zulu which strongly support

the view that ideophones are entities that exist outside of any morphological unit. These facts concern the distribution of stress and length among vowels. In all major lexical categories, except ideophones, stress and length are assigned to the penultimate syllable of a word, other vowels being short and unstressed or half-stressed. For example:

- (27) ukub'ɔ:nə 'to see', but ukubon'i:sa 'to show (cause to see)'  
 (28) 'i:nɔʒa 'dog', i'nɔʒ'a:na 'little dog', i'nɔʒan'a:na 'tiny dog'

Moreover, all formatives which are subject to these rules are at least two syllables in length.

Ideophones deviate from these regularities in every way possible. Ideophones are frequently monosyllabic, and the stress and length of their vowels must be considered as inherent rather than derived. Ideophone vowels can be short, long or extra-long. For example:

- (29) bɔ 'hitting in the small of the back'  
 d'u: 'being very quiet'  
 dʒ'a:: 'being stretched out'

A short vowel may be stressed in an ideophone. For example:

- (30) t'ɛɛɛ 'being weighed down'  
 ʒh'ifi 'squashing'<sup>9</sup>

These features, however, are regularized in the verbal derivatives of the above ideophones.

- (31) ukut'ɛ:ba 'to be weighed down'  
 ukuzh'i:fa 'to squash'

In polysyllabic ideophones, stress and length are clearly assigned on the basis of semantic criterion. Note that in the first example below, stress has to be assigned independently of length, since the final syllable is long but unstressed.

- (32) b'u: b'u: bu: 'threshing'  
 ɔt'inin'i:: 'spinning along',<sup>10</sup>  
 mbyɛnɛn'e:: 'tingling'

For some discussion of expressive phonological rules, particularly as they affect ideophones in Zulu, see Johnson (1975). The point here is that the failure of ideophones to be subject to stress and length rules which are obligatory for their verbal derivatives is automatically accounted for in our assumption that morpheme boundaries do not appear in the lexical representations of ideophones.

3. Concerning the semantics of ideophones, I would like to make some tentative proposals, which should at least stimulate discussion

on the major problems. For example, it seems relatively clear that ideophones describe sensations of various kinds, but there is a need to define the range of sensations that can be expressed through ideophones, and how this varies between languages and language groups.

A notable feature of ideophones is that they have a limited semantic domain, and that individual meanings within the class tend to be highly specific, concrete, and perceptual. These limitations doubtless reflect limitations on the human vocal capacity to evoke meanings directly through sounds. How and why these limitations exist should provide a fascinating area of research.

Another aspect of the 'domain' of ideophones is the absence of exhaustiveness within any subpart of the domain. Ideophones are not constrained to describe all sensations in any language, but only those that have some innate interest and call for some descriptive force. It would be very interesting, for example, to investigate how ideophone colour terms in a language like Zulu compare in their organization to standard colour terms. It is possible that they parallel each other in that for each standard colour term there exists an ideophone which describes the most intense shade of that colour; or there could be gaps in the ideophone inventory, so that only standard words are available for describing colours like brown; and so on.

Related to these problems is the absence of paradigmatic semantic contrasts among ideophones, which would give rise to relations such as antonymy and synonymy. Each ideophone seems to be a discrete and independent semantic unit; pairs of ideophones with interdependent meanings (like the verbal pairs increase/decrease, conquer/defeat, run/walk, love/hate) do not exist. The non-sense of negation with ideophones is probably one dimension of this particular problem. The direct negation of an ideophone cannot be a meaningful semantic unit if the ideophone is defined only by what it includes, and not what it excludes. The occurrence of ideophones in negative constructions appears from the present literature to be a universally rare phenomenon. This is probably because constructions with ideophones allow only external negation, not internal negation, and external negation is in general rare. Consider the English negative construction given in (33).

(33) The gun didn't go: bang!

(33) is a meaningful utterance if it means the same as (33a).

(33) a. It is not true that the gun went: bang!

However, (33b) is not a meaningful paraphrase, because the constituent not bang does not describe an activity (in the way that a phrase like 'not sleep' or 'not sit down' could describe a real activity).

(33) b. \*What the gun did was: not bang.

Finally, a historical problem in the semantics of ideophones is the susceptibility of this class to semantic shift. Although many Bantu languages have large ideophone inventories, there is a striking absence of cognates across languages in this group. How ideophones are created, transmitted, restructured, and dismissed from a language offers a complex historical and sociolinguistic puzzle.

4. Apart from the grammatical arguments I have presented above, I think there are two major advantages to the approach to ideophones which I am advocating. One is that the analysis stays close to basic surface facts about ideophones, such as the absence of inflection, and tries to give them a satisfactory explanation. The other is that it requires very little modification in the over-all grammar. My analysis entails only that a convention be added which allows certain predicates to be entered in the logical structure of sentences directly in their phonetic forms; and that a lexicalization rule be introduced to handle abstract predicates which get stranded syntactically by the inability of ideophone predicates to combine morphologically with them. Otherwise, the rules and conventions which generate sentences with ideophones will be the same as those for other sentences of a language.

These simple grammatical devices provide a framework for dealing with ideophones, within which an investigator is free to explore what is the most fascinating aspect of ideophones, their acoustic artistry. There can be no doubt that the ideophone inventories of many languages represent a very high level of development of the auditory imagination. As Fortune has commented concerning Shona: "We have in the ideophone an attempt to give artistic form through the medium of sound to experiences which, in other cultures, would stimulate half a dozen different arts" (Fortune 1962:43). This 'verbal art' deserves as much respect and research as those aspects of language which might be more appropriately characterized as 'verbal sciences'.

#### Footnotes

<sup>1</sup><sub>b</sub> is a voiced imploded bilabial stop. Tone has not been marked in any of the examples.

<sup>2</sup>The semantic affinity of ideophones and verbs is discussed in Dunene (1965).

<sup>3</sup>The most usual function of the Bantu neuter extension is to mark a state, and of the applied extension, to mark an action performed on someone's behalf (or against someone). The fact that the meanings differ with ideophone stems is good evidence that ideophones are not members of the category 'verb'.

<sup>4</sup>A third possible environment for certain ideophones is in apposition to an adjective. For example:



Sabona umuthi munye zwi. 'We saw only one tree.'  
 we-saw tree one IDEO(solitary)

<sup>5</sup>The only exception to this that I know of involves -thi with the applied extension -el-. That is:

U-ya-m-th-el-a bobobo. 'He gives false evidence against him.'  
 he-ya-him-thi-app. IDEO

In this case, the focus seems to be on the assertion of the action having been harmful to the recipient; that is, on whatever predicate is lexicalized by the suffix -el- (but not on -thi- per se).

<sup>6</sup>The verb ukuthi appears in a total of six syntactic constructions. Ukuthi may introduce: 1) direct quotations, 2) ideophones, 3) infinitives, 4) subjunctive clauses, 5) participial clauses, 6) present tense 'potential' clauses (cf. Doke 1955:160).

<sup>7</sup>-the, the perfect form of -thi, is used in constructions involving stative predicates.

<sup>8</sup>-ke indicates 'occasional action'. It is a member of a set of defective verbs which, in forming compound constructions with major verbs, express some adverb-like notion.

<sup>9</sup> ʔ is a voiceless dental click.

<sup>10</sup>t' is a glottalized t.

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