In any good dictionary, each entry should *inter alia* provide sufficient information for the derivation of paradigmatically related forms. In particular, it is not sufficient to give citation forms in which morphological or phonological contrasts are neutralized. Thus an English dictionary normally indicates explicitly that the plural of *thief* is *thieves*, as opposed to *chief/chiefs*, and, similarly, a Dutch dictionary normally notes that the past tense of *brenen* 'bring' is *bracht*, as opposed to *mengen/mengde* 'mix'. Of course, this assumes that the paradigms and the inflectional classes are known and that the reader can refer to matching descriptions.

The representation of tone in Bantu dictionaries is often made difficult by complex tonal alternations in the paradigms of verbs and nouns. The actual tonal profile of a word in a given context may depend on both morphosyntactic (e.g. [ ± predicative] for nouns, or [ ± followed by an object] for verbs) and phonological variables (e.g. /H ; / # #). The contrasts between different tone classes are apt to be neutralized in some environments, sometimes even in very common ones.

In the following, I shall look into the question whether lexical tones and tone classes are adequately identified in some dictionaries of the major South African Bantu languages, i.e. Zulu, Sotho, and Venda. I shall restrict myself to the major lexical categories, verbs and nouns, and, in the case of the latter, to disyllabic roots, which represent, at least to someone with my comparative bias, the major canonical shape. I shall not concern myself with the orthography of tone-marking; I regard diacritic accents, pitch diagrams, pitch figures, ciphers, and letters indicating tone classes, etc. all as potentially equivalent. I realize that the choice between these orthographic possibilities is largely dictated by pedagogical and typographical considerations.

1. **ZULU (S. 42)**

In his doctoral thesis on Zulu, Doke (1926) recognized two tone classes for each syllabic or segmental type of verb stem. In the *Zulu–English*
Dictionary (Doke and Vilakazi 1948; hereafter ZED), the only tonal information about a verb is the tone-marked imperative form. “Except for verbs of CVC root structure, this serves no useful purpose at all” (Rycroft and Ngcobo 1979: E4).

Doke 1926

ukulwa 3.2.9
ukudla 3.3-8.8-3
ukuhlanza 3.2.2.8.9
ukuhamba 2.2.4.3.9
ukwemukela 4.4.3.3-8.9
ukwemukela 2.2.4.4.3.9

ZED 1948

lwa (imper. yilwa 6.3) ‘fight’
dla (imper. yidla 6.3) ‘eat’
hlanza 6.6-3 ‘cleanse’
hamba 3.9 ‘travel’
emukela 3.3.2.9 ‘receive’
emukela 3.3.2.9 ‘desert the nest’

The examples above show that tonal distinctions are neutralized in the imperative except with CVC verb stems. Doke himself described this in 1926 (p. 218): “Words tonemically different and differing in meaning may under certain morphological circumstances become tonemically alike . . . shaya 5.4 > . . . shayana 4.3.9 [‘strike one another’], bona 3.9. > . . . bonana 4.3.9 [‘see one another’].

Even with verbs of CVC root structure, ZED leaves something to be desired. According to Rycroft and Ngcobo (1979: B11), verbs “are of three tonal types . . . in the KwaZulu dialect (and in Xhosa) but only two . . . in the Natal dialect of Zulu”. For Xhosa (S.41), the existence of a third tonal type of CVC verbs had first been asserted by Guthrie (1948: 69), and then more fully described by Westphal (1951); it had generally been denied for Zulu but this – it appears now – is a question of dialect. Tonally, ZED represents the Natal dialect, which is not merely an unfortunate choice but is also contrary to the authors’ claim (ZED p. xv; cf. Rycroft and Ngcobo 1979: G 4). It should be noted that at least some of Doke’s informants prior to 1926 did distinguish three tone classes with disyllabic imperatives, but such information did not find its way into ZED.

Doke 1926

pheka 5.4
buza 3.9
phela 3.9 (p. 212)
and 3-8.9 (p. 226)

ZED 1948

pheka 6.3 ‘to boil.’
buza 3.9 ‘to ask’
phela 3.9 ‘to come to an end’

Disyllabic nominal stems fall into four tonal classes. Fortunately, they are not neutralized in the citation form, which is the one given in ZED. Compare the following examples not involving depression:
isi-hlalo 3.2.9.9 ‘meat’  isi-bopho 2.4.3-8.9 ‘rope’
isi-kole 2.4.3.9 ‘school’ isi-khathi 3.2.3-5.4 ‘time’

2.1. NORTHERN SOTHO (S. 32)

The headword of each entry is tone-marked in the Comprehensive Northern Sotho Dictionary (Ziervogel and Mokgokong 1975; hereafter CNSD). The identification of tone classes could have been based on Tucker’s Ph.D. thesis, which appeared as early as 1929; however, this is not what the authors did.

Tucker (1929:112 ff.) distinguished three tone classes of disyllabic verbs. CNSD distinguishes but two types: LL and HL (cf. “Introduction”, p. 108). The form chosen is “the basic infinitive stem” (p. 89).²

<table>
<thead>
<tr>
<th>Tucker 1929</th>
<th>CNSD 1975</th>
</tr>
</thead>
<tbody>
<tr>
<td>ketlahlábà # #</td>
<td>-hlaba ‘to stab’</td>
</tr>
<tr>
<td>ke tla gâmà # #</td>
<td>-gâma ‘to milk’</td>
</tr>
<tr>
<td>ke tla rwâla # #</td>
<td>-rwâla ‘to carry’</td>
</tr>
</tbody>
</table>

The examples show that two of Tucker’s three tone classes are not kept apart in CNSD. Tucker did point out that the contrast represented here by ‘to milk’ and ‘to carry’ is neutralized in certain contexts, e.g. ga ké a gâmà/rwâla # # ‘I did not milk/carry’. But note that this tonal distinction is not neutralized in the citation form of the infinitive.

With disyllabic nominal roots, Tucker (1929:105ff.) distinguished four tonal classes. CNSD makes only a threefold distinction: LL, HL, and LH (cf. “Introduction”, p. 102). It is claimed that “the tone pattern of a word is given for a word used in isolation” (p. 97); but compare the citation forms as observed and described by Tucker.

<table>
<thead>
<tr>
<th>Tucker 1929</th>
<th>CNSD 1975</th>
</tr>
</thead>
<tbody>
<tr>
<td>le-tsâtsî</td>
<td>le-išatšî ‘sun’</td>
</tr>
<tr>
<td>le-hôdù</td>
<td>le-hôdu ‘thief’</td>
</tr>
<tr>
<td>le-tsâgo</td>
<td>le-tsâgo ‘arm’</td>
</tr>
<tr>
<td>mo-sâdi</td>
<td>mo-sâdi ‘woman’</td>
</tr>
</tbody>
</table>

2.2. SOUTHERN SOTHO (S. 33)

According to Tucker (1929), Southern Sotho is tonally identical with Northern Sotho in all respects that concern us here. Two Southern Sotho dictionaries with tone marks are the Southern Sotho–English Dictionary
(Mabille, Dieterlen, and Paroz 1961; hereafter SSED), and the *Tweetalige Woordenboek Afrikaans–Suid-Sotho* (Du Plessis, Gildenhuys, and Moloia 1974; hereafter TWASS). In SSED only some items are marked for tone, and the authors freely admit the imperfection of their treatment of tone (cf. “Introduction”, p. vii). TWASS is an improvement in so far as the headwords of all entries are tone marked. However, we observe the same under-differentiations in SSED and TWASS as we did in CNSD. This may be illustrated by using the same words as above for Northern Sotho.

<table>
<thead>
<tr>
<th>SSED 1961</th>
<th>TWASS 1974</th>
</tr>
</thead>
<tbody>
<tr>
<td>verbs: -hlàbà</td>
<td>-hlabà</td>
</tr>
</tbody>
</table>
| -hámá           | -hàma           | ‘to stab’
| -rwàlá          | -rwàla           | ‘to milk’
| nouns lè-shòdù | le-shòdu         | ‘to carry’
| lè-tsàshó      | le-tsàshó        | ‘thief’
| mò-sàoi        | mo-sàdi          | ‘arm’
| lè-tsàtsí      | le-tsàtsí        | ‘woman’
|                 |                  | ‘sun’

3. VENDA (S. 21)

The most complete and systematic account of tone in Venda has been given by Westphal (1962). It is clear from his description that lexical tones of verbs and non-compound nouns should be described in terms of a two-tone system, i.e. High and Low. This is how tones are consistently marked in the *Trilingual Elementary Dictionary: Venda–Afrikaans–English* (Wentzel and Muloïwa 1976; hereafter TEDV). “The tones indicated must be considered as basic tone patterns of the words when pronounced in isolation” (“Foreword”, p. viii).

Westphal (1962) describes the paradigms of two tonal types of verbs, though he must have been aware of a third type. This is apparent from his reference (p. 58n.) to the following passage from Guthrie (1948:69, 69n):

Thus in Vênda (11) -*lim*- ‘hoe’ and -*rum*- ‘send’ have quite distinct tonal behaviour, and in addition -*vaq*- ‘carve’, which is usually similar tonally to -*lim*-, has its own patterns in three or four tenses.... Thus in VENDA rovâda ("-") ‘we carved’ has a tone pattern distinct from that of roîlâ ("-") ‘we hoed’.

Westphal does not follow up this lead. He contents himself with the observation that there are but two tonal types of infinitives (which is true), and he uses no examples that are likely members of the third type such as -*vaqô*.

TEDV follows Westphal and distinguishes two types only:
There are four tonal types of disyllabic nominal roots. These appear to be adequately distinguished in TEDV.

It is not clear, however, what significance — if any — should be given to the fact that Westphal's chief example for the type L-HH, mù-sâdzi 'woman', is consistently given as mù-sâdzi (L-HL) in TEDV.

We have looked at a number of South African Bantu dictionaries, each being as far as I know the best one in its field. We have compared the representation of tone in these dictionaries with the linguistic descriptions that were available at the time when the dictionaries were written. Assuming that these descriptions are correct, it is disappointing to note that time and again dictionaries were prepared and published without paying due attention to the known tonal structures of the languages concerned. The considerable expense involved in these projects could have led to more satisfying results with almost no extra effort. To be fair, in all cases but one the classes that escaped notice are minority tone classes. (The exception concerns verbs in ZED.) The oversights are still regrettable, especially since the missing tone classes attest particularly interesting historical changes. It is to be hoped that future editions of these dictionaries as well as additional, newer dictionaries of Bantu languages will be more complete in their representation of tone.

NOTES

1. All Zulu examples are spelled according to the official orthography as it is used in Rycroft and Ngcobo (1979). Tone is indicated in Doke's notation in which the
figures 1 through 9 indicate relative pitch values, the highest being 1 and the lowest 9, and two figures joined by a hyphen indicating the end points of a contour tone. Modern descriptions of Zulu recognize the influence of depressor consonants and other phonological rules, thereby reducing the number of lexical tones to High, Low, and Falling, or even to High and Low only.

2. The spelling of all Sotho examples follows the orthography used in CNSD, except that the mid open vowels are represented as e and o rather than as ê and ô, which would have left no space for tone marks. In the examples taken from Tucker 1929, High tone is marked [ ' ], Mid tone is left unmarked, Downstepped High is marked [ ' ] Low tone [ ' ], Fall-from-High [ ^ ], and Fall-from-Mid [ ' ]. In a recent Ph. D. thesis on tone in Northern Sotho by D.P. Lombard (1976), of which I have only seen an abstract, the complexities of surface tone are reduced to two underlying tones, i.e. [ ± high tone]. In CNSD two tones only are distinguished: High, which is marked [ ' ], and Low, which is unmarked.

3. The tone marking is slightly different in the two dictionaries. Both mark High tone [ ' ], but Low tone is marked [ ' ] in SSED and left unmarked in TWASS.

4. The spelling of all Venda examples has been brought in line with the orthography used in TEDV. The diacritics used are [ ^ ] for dental articulation and [ ' ] for High and [ ' ] for Low tone.

REFERENCES

Doke, Clement M. 1926. The Phonetics of the Zulu Language. (Bantu Studies 2, Special Number.) Johannesburg: University of Witwatersrand Press. (Nendeln/Liechtenstein: Kraus Reprint, 1969.)


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