THE MORPHOLOGY OF THE TIGRE NOUN

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F. R. PALMER



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INTRODUCTION

TIGRE is geographically the most northerly of the Semitic languages of Ethiopia. In some respects it is the 'most Semitic' of these languages, and, at first sight at least, appears to be closer to the classical Geez than is any of the others. Descriptively, however, it is not very different from its immediate neighbour to the south, Tigrinya; these two 'North Ethiopic' languages stand clearly apart from those of the 'South Ethiopic' group which have, in varying degrees, lost some of the typical characteristics of Semitic. Yet the morphology of the noun in Tigre is utterly different from that of Tigrinya as well as the other languages in that it involves a vast number of forms of the types usually referred to as 'diminutives', 'singulatives', 'augmentatives', &c.2 These are not wholly uncharacteristic of Semitic,3 though they are rare in the Ethiopian Semitic languages, and it is possible that in Tigre they are partly to be accounted for in terms of linguistic affinity with the neighbouring Cushitic languages.4

Although the analysis of these 'derivatives', as I shall call them, forms the largest single section, this study is not concerned with them only, but with the entire morphology of the noun and morphologically and syntactically related class of adjective. It is based wholly on original research, undertaken in Eritrea in 1952-3; several informants were employed, but the main informant, for whose speech the statements made here are valid, was Mr. Lijam Ishaq of Mehleb, of the Mensa dialect of Tigre. Some very useful additional information on the 'countable' and 'uncountable' nouns' was provided at my request by the Rev. Clarence Duff of the

¹ On the grouping see W. Leslau, 'Archaic features in South Ethiopic', JAOS xxxi. 4, 212; E. Ullendorff, The Semitic languages of Ethiopia, London, 1955, 229, and F. R. Palmer, 'Comparative statement and Ethiopian Semitic', TPS, 1958, 120.

² Cf. W. Leslau, Short Grammar of Tigre, American Oriental Society Offprint 18, 1945, 175-6, and E. Littmann, 'Die Diminutivbildung im Tigre', Ist. Univ. Or. di Napoli, Annali, Nuova serie, ii. 89-104.

³ Cf. C. Brockelmann, 'Deminutiv und Augmentativ im Semitischen', Zeitschr. Sem. vi. 190-34.

⁴ At least in the case of the singulatives, cf. § 6.3.9.

⁵ Cf. § 2.5.

American Evangelical Mission, his informant being Mr. Johannes Mender of Gheleb; this information did not provide further examples of derivative forms, but of sentences and phrases that clarified the distinction, though naturally I must take full responsibility for the interpretation of the material.

In dealing with the derivatives there is not only the task of setting out the facts, but also a problem of establishing a framework within which to state them. For it is by no means clear what are the morphological features that must be used as criteria of classification, and the semantic classes are not easily correlated with the morphology.

Among the publications of original research on Tigre there is only one of any real value—the texts published by Littmann. The Grammatica della lingua tigre² and the more recent A Grammar and Vocabulary of the Tigre Language as spoken by the Beni Amer³ are both almost worthless to the descriptive linguist, the former because it contains a great deal of material that is more like Tigrinya than Tigre, and the latter because of its lack of any systematic linguistic, and especially phonetic and phonological, analysis. Leslau's Short Grammar of Tigre, though a work of scholarship, is based upon the Littmann texts, though Leslau was able later to supplement it by a very brief account of some original investigation.4 More recently the Wörterbuch der Tigre-Sprache by E. Littmann and M. Höfner⁵ has begun to appear. This, though an excellent work, does not contain any original material, and gives little indication of the richness of the morphology of the Tigre noun except the diminutives and the diminutive plurals. The only investigation of the morphology of the derivatives is in Littmann's 'Die Diminutivbildung im Tigre': 6 but this too deals only with the diminutives and is, unfortunately, not in great detail and largely concerned with proper names. It is phonetic description above all that has been neglected in Tigre research. This has resulted largely from Littmann's use of the Ethiopic script for his texts, for although the script is ideal for a Tigre orthography, its use disguises the striking

² Per cura della Missione cattolica dell'Eritrea, Asmara, 1919.

⁵ Wiesbaden, 1956- .

¹ Publications of the Princetown Expedition to Abyssinia, Leyde, 1910-13.

³ By A. C. Beaton and A. Paul, Publications Bureau, Khartoum, 1954. In any case it deals with a different dialect of Tigre.

⁴ Cf. p. ix, n. 2, and 'Supplementary observations on Tigre grammar', JAOS lxviii. 3, 1948.

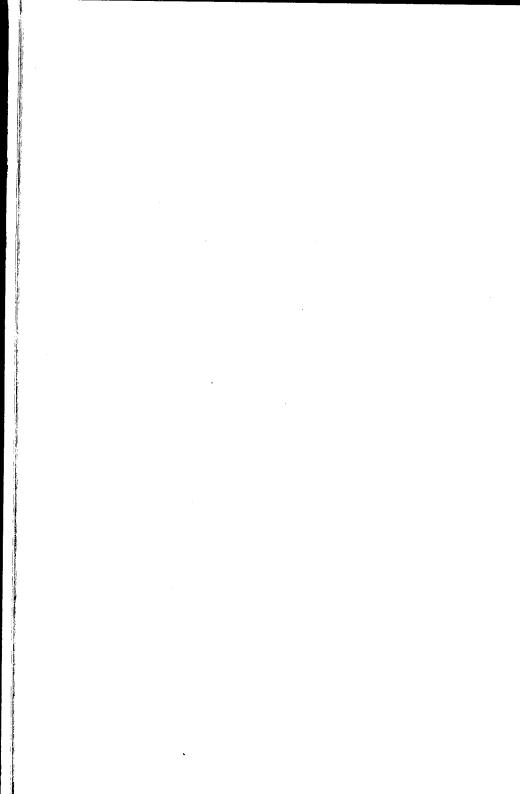
⁶ Cf. p. ix, n. 2.

ways in which Tigre differs from the other Ethiopian languages. Some acute, though brief, observations were made by Sundström in 1914; but these have been ignored in later works.

Since this work is based on original research a complete bibliography is unnecessary. Detailed bibliographies are to be found in Ullendorff's Semitic Languages and Leslau's Bibliography of the Semitic Languages of Ethiopia.²

¹ R. Sundström, 'Some Tigre texts', MO viii, 1914, 1.

² New York Public Library, 1944.



PHONOLOGY

T. T. Consonants

The consonants are:

- voiceless labiodental fricative
- voiced bilabial plosive b
- t. voiceless dental plosive
- voiced dental plosive
- ejective dental plosive t
- voiceless alveolar fricative (blade-alveolar, 'sibilant') S
- voiced alveolar fricative
- eiective alveolar affricate Ş
- š voiceless palato-alveolar fricative
- voiced palato-alveolar fricative
- č voiceless palato-alveolar affricate
- ğ č voiced palato-alveolar affricate
- ejective palato-alveolar affricate
- voiceless velar plosive
- voiced velar plosive g
 - ejective velar plosive
- voiced bilabial nasal
- voiced dental nasal
- glottal plosive
- breath ('voiceless glottal fricative') h
- voiceless pharyngeal fricative
- voiced pharyngeal fricative
- voiced alveolar trill
- voiced (clear) alveolar lateral
- palatal semivowel
- labiovelar semivowel

The most obvious classification of these is into obstruents, nasals, laryngeals, liquids, and semivowels (the order followed above). The obstruents may be further classified in two ways, first in terms of voicelessness, voice, and ejection, and secondly in terms of the place of articulation. With the exclusion of \check{c} and \check{z} , the diagram is complete except for the absence of a labial ejective:

	Voiceless	Voiced	Ejective
Labial	f	\boldsymbol{b}	
Dental	t	d	ţ
Alveolar	S	z	ş
Palato-alveolar	š	ģ	Ķ
Velar	\boldsymbol{k}	g	\boldsymbol{q}

Another classification would be in terms of 'palatalized' and 'non-palatalized' consonants, though this is essentially 'morpho-phonological'; but it is only as a palatalized form of z that \check{z} ever occurs, while \check{c} is most commonly the palatalized form of t. We must also note that in many ways the ejectives and pharyngeals form a single class, notably with regard to their relations with the vowel \ddot{a} .

The articulation of the consonants does not vary greatly with respect to their position in the word. An important negative point is that whereas in Tigrinya many of the consonants are plosive in initial or post-consonantal position, but fricative or affricate in post-vocalic position,⁴ those consonants of Tigre that are listed as 'plosive' are plosive in all positions. The ejective q, however, shares one feature with its Tigrinya counterpart—that the articulation is post-velar in post-vocalic position; but it is still plosive, not affricate as in Tigrinya. In utterance final the consonants described as 'voiced' are largely voiceless, but not phonetically identical with the 'voiceless' ones, which differ both in their release, which is tense, and in having some degree of aspiration.

1.2. Vowels

The vowels fall into two classes—short and long. This phonological classification of length is based not only on the greater phonetic duration of the long vowels, but also on the difference of the

¹ p occurs in other Ethiopian languages, but only to represent p in borrowings, e.g. Amharic petros, Greek petros, 'Peter'.

² See below, § 7 (ii).

³ Below, §§ 1.7 and 4.1.2 (iv).

⁴ Cf. F. R. Palmer, 'Gemination in Tigrinya', Studies in Linguistic Analysis (special volume of the Philological Society), Oxford, 1957, esp. p. 142.

functions of the two types of vowels in the syllabic structure of the word. $^{\scriptscriptstyle \rm I}$

The long vowels are:

- i close front (fully close and front)
- e half close front (slightly more open than the cardinal vowel)
- a open front (fully open and front)
- o half close back (but more open than the cardinal)
- u close back (fully close and back)

The qualities of these vowels do not vary greatly according to their position or environment.

The short vowels are statable as:

- a half close central
- ä half open central

These descriptions are little more than mnemonics, since the vowels vary greatly according to their positions and environment. The detailed statement of their qualities follows in the sections on vowel harmony and vowel-consonant harmony; one point that may be made here is that in many environments both vowels are much closer than their Tigrinya counterparts; Tigre \ddot{a} may be as close as Tigrinya a.

1.3. Syllabic structure

The syllabic structure of the word may be interpreted in terms of syllable types CV and CVC. Three further points may be noted.

- (i) The short vowels do not appear in word-final CV syllables.
- (ii) The long vowels rarely appear in CVC syllables, except where these are word final.
- (iii) The vowel ϑ is a 'syllable maker' in the sense that it occurs only in those places in the structure where the absence of a vowel would imply syllabic structures that are not attested for Tigre (not composed of CV and CVC syllables). For instance, in a word of the structure CVCVCV it follows that ϑ may be the vowel of the first syllable only, as in $q \vartheta mit \varphi$ 'pile of grain'; it will not occur in the other syllables, since the absence of a vowel in these

¹ Below, § 1.3.

would imply the structures CVCCV and CVCVC (whereas its absence in the first implies the 'impossible' CCVCV). This characteristic of ϑ is of importance to the morphology since the presence of a suffix alters the syllabic structure; patterns of the type farss, farsotat, 'horseman', 'horsemen', are common.¹

- (iv) There is a special problem concerning the palatal semi-vowel and the palatal consonants. For, first, there is one type of form which can only be treated as having the exceptional syllabic feature of a final CVCC syllable. This is the feminine form with the suffix -ayt, e.g. $q\ddot{a}tlayt$ 'murderess' $(q\ddot{a}tlay)$ 'murderer'). Though these forms are rare, they imply that a final -CC is possible if the consonants are y and t. This makes prima facie plausible a new interpretation of the rare palatals \check{c} and \check{z} . For as long as the transcription must be in CV and CVC terms only, these can be written only as single letters; but if CVCC is permitted, might not these be written as ty and ty? Instead of 'ty are could write *'ty and ty are then than simplify the statement since:
- (a) a form such as hälče⁵ 'my maternal aunt' would have to be rewritten hältye, with a non-final CVCC syllable;
- (b) č is morphologically not always ty, but also (though rarely) yt, as in 'äqqäč but 'äqqaytay and 'äqqaytu ('soldiers', 'soldier', 'his soldiers'). But in view of qätlayt, the forms cannot unambiguously be written *'äqqayt.

1.4. Consonant cluster

By the nature of the syllabic structure, clusters of two consonants are possible in medial position.

(i) A phonetically long consonant often has the function of a cluster of two. The term 'gemination', however, is not used to indicate clusters of this kind, but to refer to long consonants that are morphologically a single radical; all geminated consonants are 'double', but the reverse is not true. The double consonants are usually more than twice as great in phonetic duration as the single

¹ For a detailed study of the phonological problems see F. R. Palmer, "Openness" in Tigre: a problem in prosodic statement, BSOAS xviii. 3. 563-4, and for a comparison with Amharic and Tigrinya, Comparative statement, 136-8.

² Cf. §§ 5.2.5 and 6.3.9.

³ Cf. §§ 1.1, 5.1.2, and 7 (ii).

⁵ Cf. § 7 (ii).

⁶ Cf. §§ 6.3.9 and 7 (iii).

⁷ Cf. § 4.1.2 (v).

ones; a single r, for instance, may have only one or two taps, while a double rr has four or more. Double qq even when intervocalic is velar. The laryngeals and semivowels are never double, with the exception that yy is to be found at one type of stem-ending junction.

(ii) In all clusters of nasal+obstruent there is homorganic articulation. In such a position there is, strictly, no phonological criterion for identifying a nasal as m or n. The most obvious course is to write m with labials and n with all other consonants, but, even so, m before a labial is most commonly to be identified with n morphologically—e.g.

sämbu' (but sänäbbu')	lung (lungs)
'änğab ([n])	tooth
lənguy ([ŋ])	shepherd

- (iii) In the clusters dental plosive + n there is nasal plosion; in the case of the ejective t even, there is often no oral release, though the glottal closure is audible.
- (iv) The sequence -rn- alternates with -nr- with the phonetic exponent [ndr]—e.g.

šərnay/šənray pl. šäränri wheat

(v) Other than those dealt with in (i), (ii), and (iii) there are no clusters of hormorganic consonants; this includes the alveolar and palato-alveolar obstruents as a single homorganic set. The only exceptions are -gk- and -qk- at stem-suffix juncture.² The sequence dental+alveolar or palato-alveolar obstruent is equally not attested, though the reverse sequence is common. Some of these considerations are true even at word juncture with certain kinds of syntactic structures, e.g. preposition+noun or noun+noun, 'assimilation' being a characteristic of these types of structure—

e.g.	beddəgge	(bet dagge)	town house
	beğğuk	(bet ğuk)	tribal name
	'ässäb	('äd säb)	civilized country
	'äzzämat	('äd zämat)	land of Zamat
	'ət kərəššə'əb	('ət kərəs šəʻəb)	within Sheeb
	'əffättika	('əb fättika)	at your wish

If the first of the consonants is, in word isolate, ejective, the ejective

¹ Cf. § 7 (vi).

² Cf. § 7 (vii).

is still marked by glottal closure, though there is still 'assimilation' (this cannot be shown in the transcription)—e.g.

səmət dəgge

near the village

1.5. Consonant sequences

There are many limitations on the sequences of consonants, even with an intermediate vowel. Sequences that are not found in cluster are rare (this is to be expected since consonants that are separated by a vowel in one form of a word may occur in a cluster in another form). A detailed statement of the sequence possibilities cannot be undertaken here, but there are two sets of alternative sequences that are worth noting.

(i) In the environment of a nasal, there was variation between a nasal and a non-nasal consonant in:

'aman or 'ahan

stone

One informant produced the forms mänkinät (Lijam mäkinät) 'motor-car' and məškelät 'bicycle' (Italian bicicletta).

(ii) There was alternation in terms of voice and ejection with respect to two successive consonants of the same word in:

fətəq or fədəg

creek

məstəq or məsdəg

cheek

A rather different pair is:

gəsla or kəsra kind of tree

The association of l with q and r with k is reminiscent of Bilin.

1.6. Vowel harmony

The variations in the quality of the short vowels are partly to be stated in terms of vowel harmony. When followed by the front vowels i and e they are more front, when followed by the back vowel u and o they are more back, than when not followed by either of these vowels—e.g.

> [mesni:] friend mäsni sälsälätu [selseletu:] his bracelet but färäs [feres]

Or, at least of r with x in Bilin as in $d \ge x^w a r a$, $d \ge q^w a l$, 'donkey', 'donkeys', cf. F. R. Palmer, 'An outline of Bilin phonology', Atti del Convegno internazionale di studi etiopici, Accademia Nazionale dei Lincei, Roma, 1960, 109-17.

The most striking feature of vowel harmony is that when followed by the long open front vowel a, \ddot{a} has the same quality of openness and frontness, though *not* the same duration—e.g.

mänka [mankax] spoon sälsäläta [salsalatax] her necklace

The extent of the harmony is limited by the long vowels—a harmonic piece ends with the long vowel and does not extend over any other piece containing a long vowel though there may be any number of short vowels. A word containing more than one long vowel will contain an equal number of harmonic pieces—e.g.

täkobäta [tgkobata:] her mat

It follows that short vowels which are not fronted, retracted, or (\(\bar{a}\) only) fully open may occur only in word-final pieces that contain no long vowels. Any short vowel that precedes a long vowel must belong to a 'front', 'back', or 'open' piece.\(^{\text{I}}\)

This feature does not extend beyond the word, with one exception—that of a noun + the particle la. It is here the mark of a syntactical relation between two nouns—that of 'possession' (though the particle is also the 'definite article' and the 'relative'); the unity of the piece is marked by the harmony of the particle and the preceding noun—e.g.

mäbrəhät la 'ənas [mabrahat la: Pəna:s] the man's lamp

1.7. Vowel-consonant harmony

The quality of the short vowels is also to be related to the consonants in their environment. In syllables containing labial consonants they are more back (and partly rounded) while in syllables containing dental, alveolar, and palato-alveolar consonants they are more front, than elsewhere. With the semivowels w and y the backness and frontness of the vowels are particularly noticeable. The quality of a in the possessive suffix kam is such that it might be preferable to write it as $k\breve{u}m$ (without the duration of u); but this would unnecessarily complicate the transcription. These features of harmony are similar to those found in other Ethiopian (and indeed non-Ethiopian) languages, but there are two features that are especially characteristic of Tigre.

(i) Complete frontness and openness of \ddot{a} is not only to be

1 For details and examples see "Openness" in Tigre, 565-9.

accounted for by vowel harmony, but also by 'harmony' with the ejectives and pharyngeals. When either immediately preceded by, or followed anywhere within the word by, one of these consonants, \ddot{a} is fully open and front, as in

čäbäl [tʃ'abɐl] ashes
šäriṭ [ʃariːt'] line¹

This openness of \ddot{a} is wholly unaffected by the presence of any of the long vowels—it 'takes precedence over' any vowel harmony. This is illustrated clearly by the following:

şämbuka [sembuka:] her boat sänduqa [sanduk'a:] her box

The quality of \ddot{a} in the first is retracted half-open central—in harmony with u (not the a that follows); the quality of \ddot{a} in the second is open front—in harmony with q (in spite of u). An apparent (but only apparent) exception to the general rule is the singulative form of the word ' $\partial \xi \ddot{a}y$ 'wood' which is phonetically [$\Im f f f \r$] where *[$\Im f f f \r$] might be expected (the vowel of the last syllable being \ddot{a} following an ejective). But the form is to be identified morphologically not as *' $\partial \xi \ddot{c} \ddot{a}t$, but as ' $\partial \xi y \ddot{a}t$ (with radicals ', ξ , and y); the only phonetic exponent of g being the quality (not open and front) of the following \ddot{a} .

(ii) When preceded by h or 'the short vowels are much closer than elsewhere, as in

hämäğ commoner 'əbən stone

Yet in a word-final syllable closed by either of these consonants a is very front and close, while \ddot{a} is fully open and front²—e.g.

zärð' [zeri?] seed mäfrðh [mefrih] frightening gðräh [gðrah] field

1.8. Intervocalic laryngeals

For the first V of the sequence VCV where C is a laryngeal no distinction can be made on phonetic grounds between ∂ , \ddot{a} , and a,

¹ Cf. "Openness" in Tigre, 569-74.

² Examples of final h or ' are rare with the nouns but more common with verbal forms as lagba' 'let him come' and lafrah 'let him fear'.

though i, e, u, and o are still marked by their length and quality. Other than these four long front and back vowels there is but one other possibility, a short vowel of the same quality as that of the second vowel of the sequence. This could be symbolized by any of the three, o, \ddot{a} , or a, or a choice could be made on each occasion on morphological grounds. In fact, in such cases o alone will be used throughout the study. For although there are examples in which identification is possible on morphological grounds, such identification is often not possible. The vowel could be identified as o for instance in:

But there are no reasons for preferring one symbol to any of the others in:

bə'əs	[bəʔəs]	husband
bə'er	[beser]	half-grown camel
fəḥäm	[faħam]	charcoal

The symbol ϑ is to be preferred to \ddot{a} or a because the vowel has the syllabic function of ϑ —it occurs only where the absence of a vowel would imply syllabic structures not analysable into CV and CVC. This is shown by

```
mäṣ'ən (*mäṣa'ən, pl. of mäṣ'än) loaded beasts gərhu (gəräh+pronominal suffix -u) his field
```

The vowels that can be identified morphologically as a and \ddot{a} are phonetically and phonologically zero.

The vowel u, too, rarely occurs before an intervocalic laryngeal. Where it would be expected morphologically, ∂ or (according to the syllabic structure) no vowel occurs—e.g.

	bəzuḥ	bəzḥam¹ m.s. and m.p.	many
cf.	kəbud	kəbudam	heavy
	bə ggu ʻ	b otag g otag ' otag ' (fem. + otag t)	sheep

In other forms the vowel u occurs after the laryngeal as in:

bəggə'utay	a little sheep
kərkə'utay (kərku')	a little wax

The suffix in comparable forms is -etay.

¹ Cf. § 8.2. ² Cf. § 6.1.3.

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While, however, in the adjectives (bəzuḥ, &c.) u does not occur before any laryngeal, in the nouns (the only laryngeals noted in this connexion were ḥ, ', and ') though u does not occur before ', it does occur before ' and ḥ, as in

sämbu' a lung sämbu'ät a little lung luh a plank luhay a little plank

GRAMMATICAL CATEGORIES

THERE are interrelated morphological and syntactical features that are basic to the whole analysis. Details are given in the appropriate sections, but an initial outline statement is essential.

2.1. Types of 'formation'

The morphological statement comes under three headings dealing with the 'formation' of the plurals, the 'formation' of the derivatives, and the pronominal suffixes. The statement is necessarily in this order. Basic to the whole morphology are the singular forms (§ 3); the plurals are related to these in two ways, as 'broken' plurals (§ 4) and as 'suffixed' plurals (§ 5). The derivatives (§ 6) are largely to be referred to the singular forms, but some of them must be related to the broken plurals. The analysis of the forms with pronominal suffixes (§ 7) is wholly independent of the other sections, the suffixes being all freely additive.

2.2. Noun and adjective

Only the last section deals with the adjectives (§ 8). These are conveniently handled with the noun in view of the morphological similarity of many of the adjectives with the nouns. But the two classes are to be distinguished (with very little overlap),

- (a) morphologically, in that the adjectives have no forms with pronominal suffixes;
- (b) syntactically, in that the features of concord are determined by the noun and not the adjective (this is strictly true of gender at least, in that gender must often be stated lexically for the noun).

2.3. Number and gender

Concord of the forms of the nouns with verbs and pronouns requires the recognition of a two-term system of number, singular and plural, and a two-term system of gender, masculine and 12

feminine. The fourfold possibility is illustrated by the demonstratives:

	sing.	pl.
masc.	'əlli	; əllom
fem.	'əlla	'əllän

There is a serious terminological problem here in that it is convenient to use the terms 'singular' and 'plural' to refer to certain morphologically definable forms; but such singular forms are not the only forms with singular concord, while many of the plural forms do not have plural concord at all. But it would be inconvenient to restrict the terms to either the syntactically or the morphologically defined categories since there are no obvious alternative terms (and, moreover, the term 'singulative' is also required to refer to one type of derivative). The terms will, therefore, be used in both senses, but ambiguity will be avoided by referring to singular and plural concord (syntactic) and singular and plural forms (morphological). The abbreviations s. and p. (more commonly m.s., f.s., m.p., and f.p. with gender reference) will only be used to refer to the feature of concord.

It must be noted that gender does not always distinguish male and female sex, even when referring to living creatures. With living creatures the masculine form often is neutral in its sex reference, while the feminine refers to a female—e.g.

m.s.	färäs	horse (not necessarily stallion)
f.s.	färäs	mare

With non-living things the distinction is similar in meaning to that of the diminutive—the feminine refers to something attractive or small—e.g.

m.s. mora a stick f.s. mora a nice little stick¹

In general the gender of a noun, or rather of the singular form of a noun, since the derivatives have various genders, is statable lexically. But it is by no means wholly fixed, since the singular forms of most nouns usually have masculine concord, but may also have feminine concord, with the connotations illustrated above. Nevertheless, gender can and must be stated, even if there are these variations, since the gender of the singular form is directly

¹ Cf., with the same genders and meanings, Tigrinya bätri.

related to the type of diminutive, and it was clear that, where a diminutive was in common use, the informant had no hesitation about the gender of the singular.

2.4. Animate and inanimate

A distinction between nouns that refer to animate beings and those that refer to inanimate beings must be made on formal grounds. This distinction rests upon the gender of the plural forms. The plural forms of nouns which refer to animate beings ('animate nouns') have plural concord and the same gender as the singular forms—e.g.²

m.s.	dərfən	m.p.	därafən	ram(s)
f.s.	dəngəl	f.p.	dänäggəl	virgin(s)
m./f.s.	färäs	m/f.p.	'äfras	horse(s)/mare(s)

The plural forms of nouns which refer to inanimate beings ('inanimate nouns') have, most commonly, masculine singular concord—e.g.

m.s.	qa čəl	m.s.	qačlotat	bell(s)
f.s.	gäläb	m.s.	'äglub	spear(s)

But a few plural forms of inanimate nouns have plural concord (and the same gender as the singular form)—e.g.

f.p. 'əllän 'äkanat those places

One pair of examples was noted in which the form with plural concord had the connotations of 'nice':

m.s.	'əlli 'äbyat	those houses
f.p.	'əllän 'äbyat	those nice houses

In yet another pair the difference in concord was correlated to a difference in referential meaning:

m.s.	'əlli mäkayən	those machines
f.p.	'əllän mäkayən	those motor-cars

¹ Cf. § 6.3.3.

² Similarly the derivatives diminutive plural and pejorative plural of inanimate nouns usually have masculine singular concord, while those of the animate nouns have plural concord (though the gender relations are different).

2.5. Countables and uncountables

There is a distinction which is similar in its reference to that of countables and uncountables in English. This is of importance in dealing with the derivatives; it is formally established with reference to the numerals, in that the singular forms of countable nouns are used with numerals, while those of the uncountables are not. We may attest

hätte/säläs/sälasa fanus

one/three/thirty lamp(s)

but not

*ḥätte|säläs|sälasa bäläs

The form of the noun that is required is bälsät, not bäläs:

hätte|säläs|sälasa bälsät

one/three/thirty prickly pear(s)

This form is defined (in the section on derivatives) as the singulative, bäläs being the collective. The singular forms of countable nouns are all, by definition, singulatives, and those of uncountable nouns, all collectives. But just as there was some variation in the case of gender, so too there are a few nouns whose singular forms were not wholly established as either singulative or collective, though obviously, where a different (derivative) singulative form was in common use, there can be no hesitation about the identification of the singular form as collective.²

It will be noted that it is not merely the numeral for 'one' that must be followed by the singulative form (masc. woro, fem. hätte), but all numerals. The plural forms are not generally used with numerals at all.³

¹ Cf. § 6.2.2. ² Cf. § 6.3.1

³ I recorded no examples of a numeral and a plural form, but one example of this, and one example of a numeral and a diminutive plural, was quoted by Mr. Duff.

THE SINGULAR FORMS

THE establishment of one form as the singular form of each noun is essential to the entire morphology. The forms so defined are of widely different syllabic and vocalic patterns, and cannot, therefore, be positively defined by their phonological shape. But there is little difficulty in identifying them if we compare them with the other forms, since all except the broken plurals have additional elements, suffixes, while the broken plurals fall, for the most part, into a limited number of easily recognizable phonological patterns. There is little to be gained here by listing all the types of singular form; they can be ascertained from the vocabulary at the end of this work.

All singular forms are singular in concord; but there are also derivatives which equally have singular concord. They may be either masculine or feminine in concord, but gender is statable lexically only, and is not related to any phonological feature of the forms. Singular forms may be either singulative or collective. But, as we have seen, there is with some nouns variation in gender and in the countable/uncountable distinction.

The singular form is the most obvious one to treat as the 'head' of a lexical entry, and the form that is quoted when reference is made to a noun (as opposed to one form of a noun). But there are some nouns which have no singular form as defined here (negatively in that it is not a broken plural and has no suffix); the form to be quoted and listed in the vocabulary is always the form with suffix -āt, or where there is no form with this suffix, the suffix -ay. These forms, though not singular forms, are all singulatives—e.g.

$$w\partial' \ddot{a}t$$
 (no form * $w\partial'$) cow $t\ddot{a}stay$ (no form * $t\ddot{a}st\ddot{a}t$ or * $t\ddot{a}s\partial t$) bull

¹ Except for the problematic forms dealt with in § 6.3.9.

BROKEN PLURALS

THE broken plurals of Tigre are similar to those of other Semitic languages, though they are more complex in their morphology than those of Tigrinya. The essential characteristic of a broken plural is that it shares with the singular form only its consonantal features (the shared consonants being referred to as *radicals*), the vowels and syllabic structure of the broken plurals being quite different from those of the singular (though, as will be seen, there are some 'prosodic' relations involving vocalic as well as consonantal features as radicals).

4.1. General characteristics

- 4.1.1. Syntactic features. We have already noted that the plural forms of animate nouns are plural in concord and have the same gender as the singular forms; the plurals of inanimate nouns may have similar concord, but most commonly are all masculine singular.
- 4.1.2. Morphological features. The variety of broken plural forms is dealt with in the morphological analysis. There are, however, several preliminary points that may be noted.
- (i) Many broken plurals have the prefix \ddot{a} . In fact the absence and presence of the prefix is a criterion for dividing the broken plural classes into two main sections. Examples are:

färäs	'äfras	horse
mändäg	mänadəq	wall

(ii) Some of the broken plurals have the suffixes -at, $-\ddot{a}t$, and -t (or $-\partial t$)—e.g.

suq	'äswaqat	shop
şəgad	'äşəgdät	neck
dəgge	dägäggit	town

¹ Cf. F. R. Palmer, 'The broken plurals of Tigrinya', BSOAS xvii. 3 (1955), 548-66.

But there can be no doubt about the treatment of these as broken plurals, since:

- (a) they have the concord features of the broken plurals (whereas -ät as a derivative suffix implies feminine singular);
- (b) they have the morphological shape of broken plurals;
- (c) they are in complementary distribution with plurals—there are no other plural forms of each noun;
- (d) they have the meaning of plural forms.

Only in the case of -at could any doubt arise, since this is also a suffix of the derivative diminutive plural, which may have both the general morphological shape of a broken plural and the same concord characteristics. But all the diminutive plurals of the type that could be thus confused are clearly marked as diminutive plurals by a phonological feature that is characteristic of a derivative—the vowel -e-.¹ We may compare with 'äswaqat the diminutive plural 'äbyetat, whose singular and plural forms are:

bet 'äbyat house

(iii) There are some plural forms which have, apart from prefixes and suffixes, more consonants than the singular (and in a few cases singulars that have more consonants than the plurals). In such cases there is almost always a prosodic relation between them involving a radical which has consonantal exponents in the one form and vocalic exponents in the other. Examples are:

> kis 'äkyas pocket qəror qärawər glass

In the first the exponent of one radical is a front vowel and a palatal semivowel. In the second it is a back vowel and a labio-velar semivowel.

- (iv) The occurrence of laryngeals and ejectives as radicals may account for some morphological differences.
- (a) With a laryngeal as the first radical, the first syllable of a broken plural of the type with a prefix is not ' \ddot{a} C-, but Ca- (the laryngeal word initial and the vowel a not \ddot{a})—e.g.²

	'äsär	'asur	track, footprint
	ḥäyät	<u></u> ḥayut	lion
cf.	gäbäy	'ägbuy	road

¹ Below, § 6.1.2 (iii).

² Similarly with the causative prefix of the verb (also 'a-), as in häfna 'get hot', hafäna 'make hot' (but säbra 'break', 'äsbära 'make . . . break').

т8

The vowel is, for a few nouns only, not a but \ddot{a} —e.g.

häbäy häbuy monkey

(b) With an initial ejective, the prefix is, for some nouns only, not ' \ddot{a} - but ' \ddot{a} -: —e.g.

qərəd 'äqrud root čəb'it 'äčabə' finger

(c) With one type of plural, if a laryngeal is the second radical, there is a difference of syllabic structure in that a laryngeal opens a syllable, where a non-laryngeal closes it—e.g.

wəhər 'äwhərät bull şəgad 'äşəgdät neck

(v) The term gemination is explicitly reserved for a phonetically long and phonologically double consonant that is also morphologically a single radical. It is indicated in the symbolization of the syllabic structure by \widehat{CC} , as opposed to CC which represents a cluster, even of identical consonants.

We may contrast:

kərar 'äkərrät ('äCəCCät) curtain wärəq 'äwärrəq ('äCäCCəC) silver

In the broken plurals it is always the penultimate radical that is geminated. The geminated consonants, are, moreover, always preceded by the vowel \ddot{a} , whereas in plurals of very similar structures, but without gemination, the corresponding consonant is preceded by a. There is alternation of \ddot{a} with gemination and a with absence of gemination. Several of the broken plural structures can thus be paired, the absence or presence of gemination being the essential distinguishing feature. An example is $C\ddot{a}CaCaC$ and $C\ddot{a}C\ddot{c}CaC$ as in:

məsgəd mäsagəd mosque qəlçəm qäläççəm wrist

4.1.3. Meaning. The broken plural forms all refer to objects more numerous than one. It must be recalled that they are not used with the numerals (which require singulative forms).

¹ Cf. also the verbal form 'äqbäla 'he returned'—morphologically a causative.
² Cf. § 1.4.
³ Cf. 'Broken plurals', 551-2.

4.2. Analysis of the broken plurals

Nineteen main types of broken plural form were noted. These are set out below, grouped according to some of their more obvious formal characteristics.

The morphological statement that follows is based upon the diagram above, but also takes into account the distinction between the nouns whose radicals are all consonantal and those which have one radical that has vocalic as well as consonantal exponents. Apart from this distinction the plurals with the prefix are considered together, but those without a prefix are further divided according to the two main divisions in terms of syllabic structure that is indicated in the diagram.

4.2.1. Plurals with prefix ' \ddot{a} -: radicals wholly consonantal (classes I-IX). The singular forms associated with these plural classes are almost wholly of the syllabic structure CVCVC with the vowels of the first syllable restricted to ϑ and \ddot{a} and those of the second to ϑ , \ddot{a} , and a. Plurals of classes VI and VII are very rare. The presence of a laryngeal as a radical is important to the statement

(apart from the features that have already been noted);¹ this consideration partly accounts for the subdivisions that follow.

(i) With none of the radicals laryngeal, classes I, II, III, IV, V, and VIII only were attested. There is little predictability from the plurals to the singular or vice versa, except that V only is the plural (and the only plural) of singulars with a as the vowel of the second syllable—e.g.²

I (6)	käbəd	'äkbəd	belly
(2)	<i>ğäfär</i>	'äǧfər	side, coast
II (10)	mə t ə d	'ämtud	stake
(4)	qäləb	'äqlub	wish
(10)	gäbäy	'ägbuy	road
III (17)	bərə k	'äbrak	knee
(3)	näfəs	'änfas	soul
(7)	sädäf	'äsdaf	button
IV (2)	šərəm	'äšramat	pond
V (19)	şəgad	'äṣəgdät	neck
(2)	tänan	'ätənnät	smoke
VIII (5)	wärəq	'äwärrəq	silver
(13)	mädäf	'ämäddəf	young ram

Where the first radical is ejective (though only q), the prefix is, for some nouns, " \ddot{a} -—e.g.

(2)	q eta b	'äqtub	leg of bed

(ii) With an initial laryngeal, the first syllable of the plural form is, as already stated, Ca not ' $\ddot{a}C$, and only classes II and III were noted—e.g.

`ələğ	`aluž	child, youngster
<i>ḥərä</i> ş	<i>ḥaru</i> ş	stick (for beating)
'ämät	'amut	female slave
'əkəl	'akal	corn
ʻəyäb	ʻayab	sack
<u>ḥäbəl</u>	ḥabal	rope
'äsär	'asar3	track
	'ämät 'əkəl 'əyäb ḥäbəl	həräş haruş 'ämät 'amut 'əkəl 'akal 'əyäb 'ayab häbəl habal

^{1 § 4.1.2 (}iv).

² An example of each pair of related singular and plural structures (vocalic and syllabic) is given. The numbers in brackets indicate the number of examples attested.

³ Also 'asur (II).

With $C\ddot{a}$, not Ca, as the first syllable, plurals of classes III, V, and IX were attested—e.g.

III	(1)	'ädəg	'ädug	donkey
	(1)	häbäy	häbuy	monkey
V	(1)	<i>həwar</i>	häwrät	foal
IX	(2)	härəb	<u>härrəbət</u>	water-skin

Similar to the class V form above, but with gemination of the last radical (not otherwise attested) is

'azal	'äzəllät	shade of tree

(iii) With a medial laryngeal only, classes I, II, and III were attested, with one example of V—e.g.

1	(1)	bə'əs	'äb'əs	husband
	(6)	bəḥär	'äbḥər	sea
II	(2)	sə'əd	'äs'ud	strong arm
	(2)	dəhäb	'ädhub	gold
III	(4)	rəhəm	'ärḥam	belly
\mathbf{V}	(1)	wahar	'äwhərät¹	bull

(iv) With a final laryngeal no plural forms of classes I, II, and III were attested, though there are examples of classes IV, V, and IX—e.g.

IV (3) fətəḥ	'äftəḥat	justice
V (1) qəwäʻ	'äqəw'ät	crane
(1) qäyəʻ	'äqəy'ät	vomit
IX (1) gəmə'	'ägämmə'ət	boulder
(12) säfə'	'äsäffə'ət	winnowing tray
(1) färä'	'äfärrə'ət	branch of a family

There is an alternative form of class IX—'äCaCCaCät, which was attested for most of the examples ('äsaffa'ät, &c.).

(v) Nouns with no (unsuffixed) singular forms, but with lexically quotable forms with suffixes $-\ddot{a}t$ and -ay only² follow the patterns already noted—e.g.

II	(2)	kərdät	'äkrud	kind of tree
	(1)	šänkät	'äšnuk	direction
III	(1)	ləggät	'älgag	dark hollow
V	$(2)^{3}$	bərmay	'äbərmät	grass tick

^{1 *&#}x27;äwəhrät, cf. § 4.1.2 (iv).
2 Cf. § 3.
3 The other example is bə'ray, 'äb'ərät, with a medial laryngeal, cf. § 4.1.2 (iv).

(vi) There are a number of singular forms of the structure CVC, with V a short vowel, that are morphologically to be regarded as CVCC (which is not phonologically possible). In all examples but two we may establish identical second and third radicals—e.g.

III	(6)	gəd	'ägdad	cotton thread
	(2)	šär	'äšrar	half
V	(2)	gäş	'ägəşşät	face

The two examples in which the third radical is not the same as the second and has no exponent in the singular form are:

III	gən	'ägnad	border
V	qär	'äqərnät	horn

(vii) Three singular forms with a long back vowel in the second syllable were noted with plurals of class II (the more common plural for this type is XI):

qəruš²	'äqruš	dollar
'ayot ·	ʻayut	lamb
yəhudi	'äyhud	Jew

(viii) Four singular forms of the structure CVCCVC with their two medial consonants identical were noted:

\mathbf{v}	bärrad	'äbərdät	tea kettle
VIII	ləddat	'äläddət	door frame
	täbbəl	'ätäbbəl	milk jar of grass
	näggäl	'änäggəl	male kid

These are clearly to be regarded as having three radicals only: the second radical is geminated in the singular forms as well as in the class VIII plurals (but non-geminated in the class V plural).

(ix) Classes VI and VII were attested for three forms only:

VI	çəbʻit	'äčabə'	finger
	bəggu'	'äbagə'	sheep
VII	bäşəḥ	'äbaṣḥət	youth

Only the last noun has a singular form of a type that is otherwise

This is valid for the other parts of the morphology too, cf. §§ 6.3.3 (p. 56) and 7 (iv).

But qärretay, qärru (§§ 6.3.3 and 7 (iv)).

associated with a plural with the prefix \ddot{a} ; the first is the only example attested with the first radical an ejective other than q and prefix \ddot{a} - instead of \ddot{a} .

4.2.2. Plurals with prefix 'ä-: radicals not wholly consonantal (classes I-IX). The singular forms associated with these types of plural are almost all of the syllabic structures CVC or CVCV. In the majority of cases one radical has as its exponents either a front vowel in the singular form and a palatal semivowel in the plural, or a back vowel in the singular and a labiovelar semivowel in the plural.

(i) With singulars of the structure CVC only plural classes III, IV, and V were attested (with final laryngeal only IV)—e.g.

Non-laryngeal

	•	_		
III	(1)	kis	'äkyas	pocket
	(2)	bet	'äbyat	house
	(3)	ţuţ	'äṭwaṭ	dried sinew
	(5)	kor	'äkwar	pack saddle
IV	(1)	suq	'äswaqat	shop
	(ī)	goş	'ägwaṣat	side, face (of thing)
V	(1)	sol	'äsəwlät	pad for load on head
Initial	laryı	ngeal		
III	(2)	id	'ayad	food offered to dead
	` '	ḥol	<u></u> ḥawal	year
Final	laryn	igeal		
IV	(2)	zu'	'äzwə'at	word
With	no (u	nsuffixed) si	ingular	
III	(1)	nibät	'änyab¹	canine tooth
		šoqät	'äšwaq	thorn

(ii) There are a few nouns with a semivowel in the plural but no front or back vowel in the singular, the only vowel being the central vowel:

III	(1)	$d \partial s$	'ädyas	saucepan
	(2)	səm	'äsmay	name
ľV	ĺτĺ	rah	'ärwəhat	soul

¹ But 'änğab (collective) 'teeth'—singulative 'änğebät.

The second of these could be treated like gan (§ 4.2.1 (vi)), though y does not function as a radical in the forms with pronominal suffix (samu).

(iii) With singulars of the structure CVCV a few examples were noted in which the exponents of the third radical are a front vowel in the singular and a palatal semivowel in the plural—e.g.

II	(2)	məse	'ämsuy	evening
III	(1)	ləḥe	'älḥay	molar
	(1)	səga	'äsgay	meat

(iv) Two singular forms of this structure are associated with a class X plural:

ğəna	'äǧännit	child
läga	'äläggit	young bull

These could be treated as having a third radical that is wholly vocalic; this type of prosodic relation is very common with plurals of the classes XVI–XIX.²

With one noun the singular form has a semivowel (the exponent of the third radical) while the plural has a vowel only (the reverse of the usual pattern):

käray	'äkärrit	hyena
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4.2.3. Plurals of the structures CäCaCVC/CäCäCCoC and CäCä-CaCoC (classes XI-XV): radicals wholly consonantal. The majority of the singular forms associated with these plurals are of the structure CVCCVC; these are dealt with in (i) and (ii) below, which differ in the absence or presence of gemination in the plural forms. Other singular structures are CVCCVCV (iii), CVCVCVC (iv), and CVCVCCVC (v).

The distinction between geminated and non-geminated forms of the plural does not reflect any corresponding difference in the singular forms except that with CVCCVC singulars (a) all singular forms with initial ma- or $m\ddot{a}$ - (all verbal 'formations') have plurals without gemination, (b) singular forms with i, e, o, or u in the second syllable are associated with plurals without gemination only if those plurals have i or u in the final syllable (i.e. only with XII and XIII, not with XI).

(i) Many singulars of the structure CVCCVC are associated

¹ Cf. p. 22 n. 1, and § 7 (iv).

with plurals without gemination—XI-XIII. The feature that distinguishes these three classes of plural is the vowel of the final syllable— ∂ , i, and u; this is reflected in most cases by the quality of the corresponding vowel of the singular form. There is a prosodic vowel—vowel relation, central vowels in the singular corresponding to the central vowel ∂ (XI) in the plural, front vowels to the front vowel i(XII), and back vowels to the back vowel u(XIII). Although in each case there is one vowel quality only in the plural, the vowels of the singular differ in degrees of openness—the central vowels are ∂ and ∂ , the front vowels i and e, and the back vowels u and o; the open front vowel a patterns with both the front and the central vowels, and will, therefore (in spite of its front quality) be treated morphologically as belonging to both the central and the front systems. i—e.g.

Central-central

IX	(8)	məsgəd	mäsagəd	mosque
	(2)	mədmä'	mädaməʻ	blow
	(19)	məsmar	mäsamər	nail
	(5)	mäftəḥ	mäfatəḥ	key
	(29)	ğänğär	ğänağər	chain
Front	-fron	ıt		
XII	(2)	ţəwit²	ţäwawit	cartridge
	(2)	bəstan	bäsaṭin	garden
	(4)	bärmil	bäramil	barrel
Back-	back			
XIII	(1)	kətkut	kätakut	young bird
		mänduq	mänaduq	gun
	(1)	mäskot	mäsakut	window

The only vowel-vowel relation that involves a change in the prosodic feature is back-front—e.g.

XII	(1)	kətkut	kätakit³	young bird
	(7)	sämbuk	sänabik	boat

¹ Cf. 'Broken plurals', pp. 552-3, where it functions in both central and back systems.

² i.e. *təwwit, since w is never phonetically long; alternatively this noun could be treated under § 4.2.4, though it would be an exception to the general pattern there. The other example with the same structure is mostir.

³ With an alternative plural—above.

The patterns are similar where there is no singular form, the lexically quotable form having the suffix -ät—e.g.

XI	(1)	'ətfəyät	'ätafə'¹	hearth stone
XII	(1)	mändilät	mänadil	scarf
	(1)	nəggarät	nägagir	drum

(ii) The singulars associated with the plural with gemination (XIV) are all of the syllabic and vocalic structures dealt with in the previous section. But since the plural form has only one kind of vowel quality in the final syllable—central, i.e. ∂ , there are no prosodic relations to be noted—e.g.

Central

XIV (14)	dərfən dəmmäl	däräffən dämämməl	ram vengeance
(1)	ʻälləş	ʻälälləş	hawk
(9)	tärkäz	täräkkəz	heel
Front			
(1)	ḥənziz	<u> </u> hänäzzəz	cockchafe r
(14)	kərbağ	käräbbəğ	whip
(3)	tämsal	tämässəl	reflection
(1)	`anqel	ʻänäqqəl	circle
Back			
(6)	šəngul	šänäggəl	young man
(1)	sämbu'	sänäbbə'	lung
(1)	koskos²	käsäkkəs	pot for roasting coffee

The nouns with no (unsuffixed) singular forms are of similar patterns—e.g.

(5)	tənkəllät	tänäkkəl	plait
(2)	dərbobät	däräbbəb	ant-hill
(1)	zənnabät	zänännəb	head scarf
(2)	dägdägät	dägäddəg	dusty place

This involves a change of y to '; but this is not strange phonologically in view of the close front quality of a before a final '—cf. § 1.7 (ii).

² This is the only example that has a long vowel other than a in the first syllable of the singular (structure CVCCVC). But it is to be noted that, irrespective of the quality of this vowel, the first vowel of the plural is always \ddot{a} . The position is quite different in Tigrinya, where there are prosodic relations, cf. 'Broken plurals'.

(iii) With singular forms of the structure CVCCVCV only class XIV plurals were noted—e.g.

(1) məsməsa mäsämməs cause (1) sälsäla sälässəl bamboo

(2) həmbäša hänäbbəš wheaten bread

(1) 'əngera 'änäggər bread

(1) həngora hänäggər wooden spear

(I) tärqoba täräqqəb heel

(2) gərguma gäräggəm wind-pipe

Examples with a final -t are rare:

(1) 'änkäbot 'änäkkəb spider (1) käddamit kädäddəm servant (1) rəbbə'it räbäbbə' grain measure

(iv) Broken plural forms of classes XI and XIV (with a central vowel in the final syllable) were noted with singulars of the structure CVCVCVC—e.g.

XI (1) məkəwal mäkawəl hiding place (1) mäšeräb mäšarəb bodkin XIV (1) šäkänab šäkännəb pot

A unique pattern is that of:

mäkäyäli mäkayəl measure

(v) Plural class XV is associated with singulars of the structure CVCVCCVC. The pattern is like that of the singulars and plurals of class XI, with an additional initial CV syllable—e.g.

XV (1) məšəndäh mäšänadəh cut (on body)
(2) məhəngag məhänagəg scratch
(1) mäzärgäf mäzäragəf comb

Also noted with the same plural was one noun with no (unsuffixed) singular, and two with the further ending -it:—

(1) mərəbbə'ät märäbabə' stone house
 (2) mäkäškäšit mäkäšakəš coffee roaster

4.2.4. Plurals with the structures $C\ddot{a}CaCVC/C\ddot{a}C\ddot{c}CcC$ (classes XI-XIV): radicals not wholly consonantal. The singular forms associated with the plurals of these types are almost all of the structure CVCVC, but the morphological patterns are of two

kinds; in the first it is the third radical that has vocalic as well as consonantal exponents, while in the second it is the second radical that has exponents of this kind. The general characteristics are similar to those of § 4.2.2.

(i) For most nouns it is the third radical that has vocalic exponents in the singular form. Since the semivowels are never geminated, and since any front or back vowel in the singular form is reflected by the semivowel in the plural, only class XI plural forms (non-geminated and with ϑ in the last syllable) are attested. By far the commonest type of noun has as the exponent of the third radical a long front vowel in the singular and a palatal semi-vowel in the plural—e.g.

XI	(4)	w a $\dot{h}iz$	wəḥayəz ¹	stream
	(2)	ğənen	<i>ğänayən</i>	garden
	(14)	näwid	näwayəd	kid
	(1)	käleb	kälayəb	fence

But there are several nouns in which the exponent of the radical is a *back* vowel in the singular, but a palatal semivowel in the plural. Once again² there are back-front relations between the two forms—e.g.

XI	(2)	'əquq	ʻäqayəq	flat field in valley
	(4)	hädud	hädayəd	thunder

One example of a back-back pattern was noted:

<i>qəror</i>	gärawər	bottle
40101	quiuwoi	Dottic

The same patterns were found for nouns with no (unsuffixed) singular forms, and for one of the structure (singular form) CVCVCV

XI	(3)	səgadät³	sägayəd	ascent
	(3)	däkilät	däkayəl	peace-making
	(1)	särerät	särayər	bird
		säreray		
	(1)	täkobät	täkayəb	grass mat
	(1)	mäșori	mäṣawər	strap

(ii) Where it is the second radical that has vocalic as well as

i.e. *wäḥayəz (ə before a laryngeal, cf. § 1.8).

² Cf. § 4.2.3 (1).

³ Forms with a as the exponent of the third radical were noted only with this suffix -at.

consonantal exponents, the exponents are, for most nouns, a back vowel in the singular and a labiovelar semivowel in the plural form, i.e., back—back—e.g.

XI	(1)	qobə'	qäwabəʻ	hat
	(3)	kokäb	käwakəb	star
XIV	(2)	moqəh	mäwäqqəḥ	fetter
	(3)	šokän	šäwäkkən	antelope
	(3)	rošan	räwäššən	storied building
	(1)	<u>ķorəmmät</u>	<u> </u> ḥäwärrəm	pass

But there are some nouns in which the exponent of the radical is a *front* vowel in the singular and a labiovelar semivowel in the plural, i.e. with front-back relations—e.g.

XIV	(3)	mezan	mäwäzzən	scales
XI	(1)	birob	bäwarəb	sack made of grass

One example of a noun with a front vowel in the singular and a palatal semivowel in the plural was noted:

XI	tikas	täkayəs	nomad's tent

The general pattern in terms of front and back is thus the reverse of that of nouns with vocalic exponents of the third radical. Back-back patterns are common, and front-front patterns are rare; the pattern back-front does not occur, but the otherwise unattested front-back pattern does.

Plural class XII forms were also noted-e.g.

XII	(3)	fanus	fäwanis	lamp
	(3)	J	J *****	F

These are exceptional in that not only does the second radical have vocalic and consonantal exponents (front-back), but also the vowels of the final syllable are related in the reverse order—back-front.

One noun with similar prosodic relations, but in which the order of the radicals differs in the singular and plural, the radical with vocalic and consonantal exponents being final in the singular form and penultimate in the plural, is:

XIV	derho	däräwəh	fowl

A quite idiosyncratic noun, but with back-back vocalic and consonantal exponents of one radical is:—

'ənqoqho 'ənqäwaqəh egg

4.2.5. Plurals with the structure $G\ddot{a}GaGi(t)/G\ddot{a}GGGi(t)$ (classes XVI-XIX). The majority of the singular forms associated with these types of plural are of the structure CVCCV; a smaller number have the structure CVCVCV. Others are of the pattern CVCV, but with a radical that has a vocalic exponent in the singular form and a consonantal exponent in the plural.

(i) The singular forms with the structure CVCCV have a variety of different vocalic patterns; these are not to be associated by any general rules with any of the four plural patterns—e.g.

XVI	(1)	šəkna	šäkani	hoof
	(2)	šägla	šägali	fig
	(1)	wägre	wägari	olive
	(1)	dä'ro	də'ari	sycamore
	(1)	soldi	säladi	money
XVII	(1)	mämba	mänabit	master
	(1)	mäsni	mäsanit	friend
	(1)	'ärwe	'ärawit	serpent
XVIII	(3)	dəkka	däkäkki	stool
1	(1)	<i>ḥəndi</i>	<u> ḥänäddi</u>	hoof
	(1)	'ətro	'ätärri	water-jug
	(1)	qärso	<i>qärässi</i>	ankle-bone
9	(1)	katra	kätärri	pigeon
	(1)	'eṭro	ʻäṭärri	dik-dik
XIX	(5)	məgda	mägäddit	bonfire
1,	(1)	qəlfi	qäläffit	button
	(3)	dəgge	dägäggit	town
	(2)	dəmmu	dämämmit	cat
	(2)	gənto	gänättit	young female baboon
	(1)	šärbe	šäräbbit	soup
	(3)	särgo	säräggit	trinket
	(8)	näbra	näbärrit	food
9,	(2)	walta	wälättit	shield
	(1)	mokla	mäkällit	youth come of age

Many singular forms have a final -t, though in most cases the plural is class XVI or XVIII, without a -t—e.g.

XVI	(2)	fändot	📝 fänadi	buttock
XVIII	(1)	qəmbet	qänäbbi	backyard
	(2)	təgrat	tägärri	water pail
	(1)	kädbet	kädäbbi	floor

In the few cases where the plural also has -t, only class XIX is possible; class XVII with final -t (and -t also in the singular) would be regarded as class XII, with the -t as a radical; this type of interpretation is not possible with class XIX since there is no plural type $C\ddot{a}C\ddot{a}CCiC$ —e.g.

XIX (1) kərbit käräbbit match (1) mämfet mänäffit sieve

(ii) With singular forms of the structure CVCVCV, three classes of plural form were noted—e.g.

XVII	(1)	wäreza	wärazit	bachelor
XVIII	(1)	mašela	mäšälli	sorghum
XIX	(1)	dəqala	däqällit	bastard
	(1)	säqäla	säqällit	roof
	(1)	däbela	däbällit	he-goat

One example of a noun with a final -t in the singular was noted:

XVIII mäčarit mäčarri back of lower jaw

(iii) With some nouns the second radical has vocalic exponents in the singular form. The patterns are similar to those of § 4.2.4 (ii); the vowels of the singular forms are both back and front, but the consonant of the plural is a labiovelar semivowel only (backback and front-back). The plural forms are all of class XVIII—e.g.

 (2) dosa
 däwässi
 hut

 (1) țišo
 țäwäšši
 pot

 (1) 'ela
 'äwälli
 well

 (2) qețo
 qäwäţţi
 arm-chair

There are singular forms with a final -t (and one with a final $-\ddot{a}t$).

(1) qišot qäwäšši village (1) 'esat 'äwässi back (1) konat käwänni spear (1) korit käwärri ball (1) qogät qäwäggi kind of tree

One noun of a similar pattern was noted, but with the semivowel as the third consonant of the plural form:

mora märäwwi stick

(iv) Some nouns with these plurals have a palatal semivowel in the singular form—e.g.

XVI	(2)	mə'tay	mə'ati	entrance
XVIII	(1)	dəbbəyät	däbäbbi	ambush
		foqäy	fäwäqqi	top of shoulder
XVII	(1)	fəluy¹	fälayit	half-grown calf
	(1)	sämuy	sämayit	cattle trough
XIX	(6)	č ənčay	<i>čänäččit</i>	fly
	(2)	ʻänşay	'änässit	mouse

The class XVIII forms could be treated as having a fourth radical y; they would then belong to class XIV—* $d\ddot{a}b\ddot{a}bb\partial y$, * $f\ddot{a}w\ddot{a}qq\partial y$. But a similar treatment of the other forms is not plausible in view of the final t; it would imply classes XI and XIV + t, which are not attested elsewhere, and a final yt, which though not impossible in Tigre, is rare.² But these examples serve to show the close parallelism of classes XVI–XIX and classes XI–XIV. It could, indeed, be suggested that the only difference between them is that the fourth radical of the former is vocalic, while the fourth radical of the latter is consonantal.

Several nouns have plurals of the types considered here, but singulars of structures that have been dealt with elsewhere:

XVI	higa	hägägg i	speech
	mäbäl	mäbälli	widow
XVIII	həmmäm	hämämmit	leopard

- 4.2.6. Other types of plural. There are a number of other plural forms that cannot be dealt with as plurals with suffixes, though few of them belong to a regular pattern.
- (i) There are two further classes of plural, which, though of different patterns from those already dealt with, are still to be handled together with them, as classes XX and XXI—CaCäC and CäCCäC—e.g.

XX	(4)	'əgər	'əgär	foot
	(1)	sol^3	səwäl	pad for load on head

The feminine form is *folit*; this can be dealt with under § 4.2.4, the plural being written as *foliayot*, since there is no phonetic distinction between -yo- and -yi-.

² Cf. § 1.3 (iv). ³ Cf. also § 4.2.2 (i).

XXI	(1)	nəgus	näggäs	king
	(1)	fälasit	fälläs	priest
	(1)	šum	šäyäm¹	chief

The class XX forms raise a problem in the morphological statement since there are many nouns which have one form of this pattern and another with the suffix -ät. One interpretation of this (and the interpretation followed here) is that the unsuffixed form is the singular and collective and that the suffixed form is the singulative—e.g.

singulative	zəbdät	a piece of butter
collective	zəbäd	butter

But an alternative interpretation is that the unsuffixed form is a class XX plural, and that the noun has no singular, the lexically quotable form being the singulative with suffix -āt. The relevant facts are discussed in more detail in § 6.3.9. But the decision is a practical one. We cannot ask whether these forms are really plural or really collective; rather they have something in common with both.

(ii) There are a number of plural forms which have the pattern of those we have considered, but which are not related to the singular forms in any 'regular' way. These are—

(III)	gä ʻ	'äg'at	black lizard
(III)	ţälit	ʻaṭal	she-goat
(VI)	wälät	$\ddot{a}wal et d$	daughter

Some forms have a suffix -t or $\ddot{a}t$ that is not usually found with the plural form:

(XI)	mäbrəhät	mäbarhət	lamp
(XI)	mänfə'ät	mänaf'ät	profit
(XI)	mämhər	mämhərät²	teacher

Two nouns were noted with a final -b instead of -t in the plural form:

(XVII)	faytät dällal	fätayib dälalib	prostitute agent, middle man
¹ i.e. *šä	iyy <i>äm</i> (y not ger	minated).	² i.e. *mämahərät.
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(iii) Plurals that are wholly idiosyncratic and do not resemble any of the patterns noted are:

'əde	'ədäy	hand
ḥи	<i>ḥäw</i>	brother
wäd	$w eg lad^{\hspace{.05cm}\scriptscriptstyle extbf{I}}$	son
<u></u> ḥət	ḥäwat	sister
zabəţ	zəbbaţ	officer
'əgal	'əgəl	calf

(iv) Finally, there are some forms that may be paired distributionally and semantically as singular and plural, though they have no phonological features in common:

'ənas²	säb	man
'əssit	'änəs	woman
wə'ät	'äha	cow
nə'ät	'ənsa	camel

¹ But cf. §§ 6.3.3 and 7 (vi).

² Or bə'äl when part of a phrase of the type bə'äl fəḥām 'charcoal man'—plural säb fəḥām.

SUFFIXED PLURALS

5.1. General characteristics

The syntactic, morphological, and semantic features of these forms make it quite clear that they are to be classed together with the broken plurals, and not to be treated as derivatives.

5.1.1. Syntactic features. The suffixed plurals have the same syntactic relations as the broken plurals with regard to number and gender. Animate nouns have forms which are plural in concord and of the same gender as the singular; inanimate nouns forms which are most commonly masculine singular only. The contrast between the plurals and the derivatives is shown most clearly by considering animate nouns with the suffix -at, which is both a plural and a derivative suffix. The derivative forms are all feminine plural in concord, irrespective of the gender of the singular (whereas the plural forms have the same gender as the singular)—e.g.

(pl.)	m.s.	ḥäräwya	m.p.	<u></u> ḥäräwyatat	wild pig
	f.s.	katra	f.p.	katratat	pigeon
(der.)	m.s.	'ənas¹	f.p.	säbetat	man
m	ı./f.s.	'əgal	f.p.	'əgelat	calf

5.1.2. Morphological features

- (i) An important negative feature is that the plural forms have none of the morphological characteristics of the derivatives. Especially to be noted is the frequency of the vowel e (replacing another vowel) in the derivatives, but its absence in plural forms. This is illustrated from the examples in the previous section, but is further stressed by the comparison of the plural katratat above with the derivative katretat.²
- (ii) One suffix has the palatal $\check{c}(\ddot{a}\check{c})$; this occurs elsewhere only as the palatalized form of $t.^3$
 - 5.1.3. Meaning. Like the broken plurals, the suffixed plurals

¹ See above, § 4.2.6 (iv).

² Cf. § 6.3.7.

³ Cf. §§ 1.3 (iv) and 7 (ii).

refer to objects more than one; they, too, are not used with numerals. The derivatives with suffix -at which were mentioned above are paucatives 'a few', or pejorative plurals 'some poor . . . '. I

5.2. Analysis of the suffixed plurals

The classification is wholly in terms of the type of suffix.

5.2.1. Suffix $-\ddot{a}\dot{c}$. Only three forms in which the suffix is additional to a singular form were noted:

'äf	'äfäč	mouth
'äb	'äbäč³	father
häm	hämäč	father-in-law

Three nouns with no (unsuffixed) singular but a quotable form with suffix -ay are:

käray	käräč	hyena
tälay	täläč	shepherd
<u>h</u> ärmay	<u> ḥärmäč</u>	robber

The last two are verbal formations of the type dealt with in § 5.2.5; härmay also has the 'regular' plural härmät.

5.2.2. Suffix -ot. This suffix is limited to nouns whose lexically quotable form has the suffix -ay. The only examples noted were:

ḥärästay	ḥarastot	peasant
waṭay	waţot	musician
tästay	tästot	bull

- 5.2.3. Suffix -at. This is the commonest of the plural suffixes. The need to distinguish between the plural forms with -at and the derivatives with the (phonologically) same suffix has been stated already. The suffix is confined to nouns with singulars of a variety of types.
- (i) It is common with nouns whose singular form is CVC or CVCVC with the vowel a in the final syllable—e.g.

(17)	fas	fasat	axe
(2)	zəfan	zəfanat	throne
(8)	'äkan	'äkanat	place

(ii) It was commonly found, though, with a juncture feature of t, with nouns whose singular forms end in a vowel. The varieties

¹ Cf. §§ 6.3.7. and 6.3.8.

² Leslau (Short Grammar, 178) includes 'äyyäč and 'ällač; but these are treated as collectives, not plurals, in this study; cf. § 6.3.9.

³ But 'äbäw (unique) 'forefathers'.

of vocalic and syllabic shapes are too numerous to list (53 examples in all were noted)—e.g.

məsli məslitat image gəmfəlle gəmfəlletat thumb

(iii) It was rarely found with nouns whose lexically quotable form has the suffix -ät. Examples noted were:

(1)	nälät	nälat	kind of deer
(2)	šakät	šakat	grassy watering-place

(iv) A more complex pattern is found with examples such as the following:

(1)	fəre	fəryat	corn
(1)	ḥägo	ḥägwat	belt of beads
(1)	lim	lämyat	cream
(1)	šäwet	šäwyat	ear of corn
(1)	sətet	säytat	rib
(5)	basot	bäswat	forehead

These may still be treated in terms of the suffix -at though two additional features must be noted.

- (a) A third radical with vocalic exponents (front and back vowels) in the singular, but consonantal exponents (semivowels) in the plural is to be recognized.
- (b) The vowel of the first syllable of the plural is \ddot{a} irrespective of the vowel of the singular; this type of vowel change is found with the derivatives.

Of a similar pattern, but involving different vowels, is:

təkay	takyat	pillar of house
(v) The suffix is also	found with:	
'əm	'əmmat	mother
$`\partial n$	'əntat	eye

In dealing with the broken plurals mention was made of similar nouns with singular forms which are phonologically CVC but morphologically CVCC.²

5.2.4. Suffix -otat. This suffix is found with nouns whose singular or quotable forms are of several types.

¹ Cf. § 6.1,2 (iv), ² Cf. § 4.2.1 (vi).

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(i) It is common with nouns which have a quotable form with suffix -ät—e.g.

(2)	sə'ät	sə'otat	watch
(1)	sänät	sänotat	year
(2)	ʻämmät	'ämmotat	paternal aunt

(5) 'adät 'adotat custom (5) täblät täblotat lock

(1) kofyät kofyotat Muslim's hat

(1) həmmärät həmmärotat baobab (2) sälsälät sälsälotat necklace, watch-

chain
(1) 'äräbiyät 'äräbiyotat hand-cart
(1) ğälläbyät ğälläbyotat Muslim shirt
(1) səltanyät səltanyotat enamel pot

(ii) It is the only plural form associated with singulars of the type:

(8) gadəm gadmotat plain

Note also

(1) tälakəm tälakmotat husband's brother

(iii) Other plurals with this suffix are:

(1) hal halotat maternal uncle

(2) qandel qandelotat small lamp (1) gäräwan gäräwanotat big tin

(1) garawan garawanotat big tin (1) gäräwin gäräwinotat pick-axe

(I) 'əmmoləd 'əmmoldotat midwife

(iv) In a few cases the singular form has a final vowel that does not appear in the plural—e.g.

(1) badelabadelotatshovel(2) fätänafätänotatproblem(1) kərəmbakərəmbotatcabbage(1) 'äg'ərra'äg'ərrotatherd

(v) Some nouns with a phonologically CVC but morphologically CVCC singular form were noted:

häl hältotat maternal auntäd 'äddotat country

Historically a broken plural of mə'əl.

We must also note:

nə'äl

nə'ältotat

sister-in-law (of woman, in either sense)

5.2.5. Verbal forms. There are some verbal nouns ('agents') which have a pattern peculiar to them. The singular forms are of the structure $C\ddot{a}CaC$, and the plurals have the suffix $-\ddot{a}t$ together with the vowel e instead of \ddot{a} in the first syllable and with absence of the second vowel—e.g.

säraq

serqät

thief

These are as numerous as the verbs; the verb 'he stole' is särqa. They are not listed in the Vocabulary.

Another form with a similar meaning has the suffix -ay or -ayt (the former masculine, the latter feminine). But there is no other plural form—e.g.

qätlay

qätlayt

murderer, murderess

We have already noted the syllabic peculiarity of the feminine form.

5.2.6. Double plurals. One example of a 'double plural' was noted:

nälät nälat

nälatat

kind of deer

This must be distinguished from the plurals which have double exponents of plurality, e.g. the broken plural class IV forms ('äswaqat), since nälat and nälatat are both attested, and with different meanings (the latter 'very many...'), whereas the broken plural class IV forms are the only plural type forms of the nouns. The double plural or 'big plural' is thus a distinct morphological class in Tigre, though only the example quoted above was noted. Whether this is to be treated together with the plurals or the derivatives is a matter that can be decided only arbitrarily.

DERIVATIVES

THE forms with suffixes other than those that have been treated as plurals are all handled under the heading of 'derivative'. The suffixes are first, the very common -ay, $-\ddot{a}t$, -am, and -at and the much rarer -it, and secondly, $-\ddot{a}tit$, which is clearly to be regarded as a double suffix composed of $-\ddot{a}t + -it$; there are, thirdly, the endings -etay, -etam, and etat, whose precise status is to be discussed.

The reasons for not treating all suffixed forms together but for handling some as plurals have already been given. The analysis of the derivatives is partly based upon the morphological statement of the broken plurals, and, therefore, posterior to it.

6.1. General characteristics

- 6.1.1. Syntactic features. We are concerned in this section not only with number and gender, but also with the distinction between countables and uncountables.
- (i) The number and gender of the derivatives is wholly statable in terms of the suffix. In the case of the suffixes -am and -at the distinction between animate and inanimate nouns is again relevant. But the gender does not depend (as it does with the plurals) upon the gender of the singular form, but wholly on the suffix itself. The rules are:

-
.s.
).
.s.
.p.
.s.

This does not, however, imply that the gender of the singular form is irrelevant to the morphological statement. On the contrary, it will be seen later that one of the criteria of classification is the gender relation between the singular (unsuffixed) form and the form with the derivative suffix.

(ii) It is equally important to know whether the noun is countable or uncountable—whether its singular form is singulative (used with numerals) or collective (not used with numerals). Upon this will depend the distinction between some of the categories, notably that of the diminutive and the singulative. The suffix -ät, for instance, is a mark of the diminutive of countable nouns, but of the singulative of uncountables—e.g.

(sing.)	fanus	a lamp
(dim.)	fanusät	a little lamp
(coll.)	fəḥäm	charcoal
(sing.)	fäḥmät	a piece of charcoal

6.1.2. Morphological features

(i) The stem structure of most of the forms is that of the singular. But some of the forms with the suffixes -at and -am have the stem structure of the corresponding broken plural—e.g.

	häbäy	häbbeyay ¹	häbbeyam	monkey
But	<i>ḥäyät</i> ḥayut (br	<i>ḥäyetay</i>	<u> </u> hayutam	lion

(ii) Where the singular form ends in a vowel, there is the juncture feature of a voiceless dental stop t—e.g.

sə'li sə'lität picture

(iii) Many of the derivatives have the vowel e in place of o, \ddot{a} , or a in the final syllable of the singular form, or, if the stem structure is that of the broken plural, of the plural form—e.g.

	'ənas	'ənesay	man
	däbna	däbnetay	rain cloud
(färäs)	'äfras	'äfresam	horses

The endings -etay, -etat, and -etam, whose status was left in doubt, can be treated as the vowel e, occurring not within the stem but after it, plus the suffix; the t is accounted for as the juncture feature. But we must note that däbnetay above is not an example

¹ For the gemination and the vowel e, see below, (iii) and (v).

of such an ending—the e in this form replaces an a in the stem. Examples of these endings are:

gor	goretay	neighbour
bayhot	bayhotetat	jackal
bärmil	bärmiletam	barrel

(iv) A different type of vowel alternation involves the presence of the central vowels in the suffixed form—e.g.

bəläq	bälqät	rock
ğəban	<i>ǧäbänät</i>	coffee-pot

These exemplify only \ddot{a} in the suffixed form. Examples with a are found with gemination only (next section).

(v) Many of the forms have gemination of the final or the penultimate radical—e.g.

qəmäl	qəmällay	louse
	qəmmälät	

Gemination is found also with the features stated in (iii) and (iv) (with the vowel ∂) and even with a combination of both—e.g.

(iii)	färäs	färresay	horse
(iv)	'əbən	'əbbänät	stone
	šeṭan	šeṭənnay	devil
(iii)+(iv)	rošan	rošənnetat	storied building

6.1.3. *Meaning*. The meanings of the derivatives are varied but fall into four different categories—sex, quantity, quality, and size. The possibilities are:

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sex—male or unstated, female quantity—unstated, one, a few, many quality—unstated, bad size—unstated, small, very small, large
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Sex is associated mostly with the gender of the singular form, though there is no one-to-one gender-sex relationship. Many nouns that refer to domestic animals have a form with the suffix -ät or -ət that specifically refers to the female—

käləb	kälbät	dog/bitch
näwid	näwidät	kiď
'ädəg	'ädgət	donkey
bəggu'	bəggə'ət²	sheep

¹ Cf. § 2.3.

² Cf. § 1.8.

But these can only be stated lexically—there is no similar feminine form of, for example, färäs 'horse'. In view of this, and because the forms involve the otherwise unattested suffix -ət, this sex distinction is not to be dealt with under the morphology of the derivatives, but is simply to be stated as a lexical feature. It involves, it will be seen, the singulative forms; from these, different (masculine and feminine) diminutives and diminutive plurals may be derived (see below), but in the plural form the sex distinction is made by the gender concord only; näwayəd, for instance, refers to kids with no sex reference or to female kids, according to its concord.

There are other pairs of forms, one with and the other without the suffix -ät, that do not fit into the general pattern of the derivatives but must be stated lexically only. These are:

<i>ḥäsin</i> (m.)	iron	ḥäsinät	quality of iron
häsur (m.)	fence, zariba	<u></u> ḥäsurät	branch used for fence
mätbə' (m.)	stamp, seal	maṭbə'ät	printing-press
mäkina (m.)	machine	mäkinät	motor-car

The other categories are to be found only in certain limited combinations. Eight classes are to be found; these together with obvious names for them are as set out below:

	Quantity	Quality	Size
Collective	_		_
Singulative	one	·	
Pejorative	one	bad	
Diminutive	one		small
Double diminutive	one	-	very small
Augmentative	one	_	large
Paucative	a few	_	
Pejorative plural	many	bad	

Two obvious features are that size and quality are not stated together (though the diminutive often has the connotation of 'nice little' rather than just 'little'), and, secondly, that quality and size are not stated without a statement of quantity.

6.2. Problems of classification

There is a double problem; first, of deciding how many of the morphological features are criteria relevant to the classification and how many of them are phonologically or lexically determined, and, secondly, of relating the morphological and other formal characteristics of the forms with the semantic classes.

6.2.1. Morphological classes. The morphological classification of the forms may be made almost entirely in terms of the suffixes, the suffix alone being the mark of each class.

The features of vowel quality and gemination and even the distinction between forms with the structure of the singular and those with the structure of the broken plural may almost entirely be treated as irrelevant to the classification. The occurrence of these other phonological features is partly predictable in terms of the features of the singular form. Gemination and the vowel e are characteristic, for instance, of forms whose singular is of the pattern $C\ddot{a}C\ddot{a}C$, though there is no gemination where the pattern of the singular is CaCaC—e.g.

färäs	färresay	horse
kətab	kətebay	book

The presence of a laryngeal, too, may account for a difference in the form—e.g.

färəd	färreday	revolver
säfə'	säf'etay	winnowing tray

With other nouns the occurrence of these features can only be stated lexically. We may compare:

zəbäd	zəbdät	butter
čəgär	<i>čəggärät</i>	hair

The occurrence of the features, may, however, be partly correlated with the semantic classes. We may contrast, for instance:

färäs	a mare	färresät	a little mare
bäläs	prickly pears	bälsät	a prickly pear

The first of the derivatives is diminutive, the second singulative. But this need not concern us yet, since there is no contrast between the two. There are no forms *färsät or *bällesat. For the purely morphological classification we can treat these as members of a single class—that of forms with the suffix -ät.

In the vast majority of cases, forms that differ in respect of these features, but have the same suffixes, are in free variation—e.g.

nəhəb	bees	nəhbetat 'änhebat	a few bees
wə'ät	a cow	wə'etat wə'at	a few cows
ləban	incense	ləbanät ləbenät	a piece of incense
'ənas	a man	'ənasetay 'ənesay	a weak man

But there are two exceptions to the general rule that the morphological classes are to be determined wholly by the suffixes in a one-to-one relation.

(i) There are no examples of a noun with a form with the suffix -it (a rare suffix) and also a form with -it or -iy. The gender of forms with -it and with -it is feminine singular, and these two suffixes may thus be taken together as criteria of a single morphological class, the choice of suffix being lexically determined.

(ii) There are a few pairs of forms, both with the suffix -ay and both forms of the noun, which are in contrast with each other—e.g.

a wrist	qəlčəmmay	a strong wrist
	qəlčemay	a weak wrist
charcoal	fäḥmay	a large piece
		of charcoal
	fäḥmetay	a poor piece
		of charcoal
	bə'ray	an ox
	bəʻretay	a little ox
		charcoal qəlčemay fäḥmay fäḥmetay bə'ray

The feature that distinguishes all the paired forms is the presence or absence of the vowel e. With the suffix -ay, therefore, this vowel is, in some cases at least, a criterion for the morphological classification. In fact, however, the distinction exemplified by qəlĕəmmay and qəlĕəmay in which one form has the vowel e replacing another vowel while the other does not (but in most cases has gemination), cannot be subsumed under any general morphological rule. Where examples occur, they are to be dealt with individually. On the other hand, in the case of fäḥmay and fäḥmetay, in which, while only one form has the vowel e, this vowel follows the stem and does not replace any other vowel, the distinction

differentiates derivative classes. In such cases the ending -etay bears to the suffix -ay the same relation as the suffix -ätit does to the suffix -ät, and it is, therefore, convenient to refer to -etay as one of the suffixes, distinct from -ay, and, further, to treat it, like -ätit, as a double suffix. But in spite of the morphological similarities there are no similar reasons for treating the endings -etam and -etat as suffixes distinct from -am and -at.

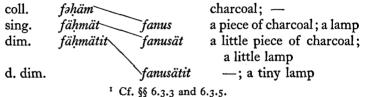
The total number of morphological classes is, therefore, six:

- (i) suffix -ät or -it
- (ii) suffix -ätit
- (iii) suffix -av
- (iv) suffix -etay
- (v) suffix -at (-etat)
- (vi) suffix -am (-etam)
- 6.2.2. Semantic-morphological relations. The semantic and the purely morphological classifications of the derivatives are widely divergent. A form with the suffix -ay (without the vowel e) may be singulative, diminutive, pejorative, or augmentative—e.g.

čib	nits	čibay	a nit
häšil	a jackal	ḥäšilay	a little jackal
fəham	charcoal	fäḥmay	a large piece of charcoal
'əssit	a woman	'əssitay	a poor, bad, woman

But if certain formal characteristics are taken into consideration (other than those of the form itself of the derivatives) a formal classification that largely coincides with the semantic one is possible.

(i) If we compare the morphological and semantic classification of the countable and uncountable nouns, we find that the two types of classification are merely 'out of phase'. If we number the forms in a sequence based upon the meaning, there is a formal correlation between a form of the uncountable and the form next in the sequence of the countable. This is illustrated by the diagram below, where the horizontal arrangement is semantic and the formal correlation is marked by the sloping lines:



What is important here is not the type of suffix, but the place of the form in the sequence of suffixation.

- (ii) With countable nouns a difference in gender from that of the singulative is always a mark of a pejorative (suffixes -ät and -ay) or of a pejorative plural (suffixes -at and -am). Although gender is statable in terms of the suffix, what is important is whether the form has the same gender or a different gender from that of the singular.
- (iii) The suffixes -at and -am have plural concord (feminine and masculine respectively) with animate nouns. This allows us to make a distinction between plural-type derivatives (with these suffixes) and singular-type derivatives.

Taking these features into consideration, together with other more general features that have already been noted, we may link the semantic classes to formal criteria. These are set out below, but a full explanation is only to be found in the various relevant sections of $\S 6.3$.

(a) Singular-type derivatives:

collective—forms not used with numerals;

singulative—forms regularly used with numerals;

diminutive—forms with the gender of the corresponding singulative, but with an additional suffix;

double diminutive—forms with a suffix additional to that of the diminutive;

pejorative—forms with a different gender from that of the singulative, and with an additional suffix.

augmentative—forms with a different gender from that of the singulative, and with a different (not additional) suffix.

(b) Plural-type derivatives:

diminutive plural—forms with the same gender as the singulative:

pejorative plural—forms with a gender different from that of the singulative.

It is clear that the analysis is largely based on the singulative form, not on the (unsuffixed) singular form (though this may be the singulative form), in spite of its morphological 'simplicity'. A detailed explanation and, therefore, a justification of the criteria stated above is given in the analysis that follows.

6.3. Analysis of the derivatives

The classification used in this statement has a semantic basis, but the classes are definable formally, as shown in the previous section. The semantic and formal classes cannot, however, be made wholly equivalent, and exceptions are noted in the sections that follow.

6.3.1. Collectives. The collectives are defined as those forms that may not be used with the numerals. These are, of course, all singular forms of uncountable nouns—e.g.

nəhəb bees ful ground-nuts

With numerals the (singulative) forms used are nəhbät and fulät. Further points to note are as follows:

(i) The semantic distinction between collectives and singulatives is often very similar to, and perhaps identical with, the distinction between plurals and singulatives. This, as will be seen later, is a source of some difficulty. But it must be noted here that the fact that a noun has a collective form does not imply that it has no plural form. On the contrary, many nouns have both a collective and a plural. The difference in meaning is not always clear, as, for instance, between nohab and the plural 'änhab, both of which can only be translated 'bees'. But in some cases there is a clear difference in meaning, as in:

coll. wəraq paper sing. wäräqät a piece of paper pl. wäräqotat pieces of paper

(ii) There are some nouns whose singular form must be regarded as belonging to two different morphological formations, and as collective in the one and singulative in the other. This is notably the case with nouns referring to parts of the body and to kinds of meat—e.g.

sing. sämbu' a lung dim. sämbu'ät a little lung coll. sämbu' lung sing. sämbu'ät a piece of lung

Another example is bun 'coffee', which as a collective has the meaning 'coffee-beans' or 'coffee-bushes', with a singulative bunät,

¹ Cf. § 6.3.9.

² In the sections dealing with the formation of the plurals (§§ 4 and 5) no notice is taken of this and all translations are into English singulars. But in the vocabulary translation into English plurals is made where appropriate.

but as a singulative bun has the meaning 'a cup, or glass, of coffee' ('a coffee'). We may compare:

kəl'e bunät (not bun) two coffee-beans/bushes kəl'e bun two coffees

- (iii) The concord of the collectives is almost always masculine singular. Feminine singular concord was rarely noted; forms that have plural concord, yet may be treated as collective, are among the problematic forms treated in a later section.¹
- 6.3.2. Singulatives. These are defined as the forms that are regularly used with the numerals. In fact all forms other than the collectives, the diminutive plurals, and the pejorative plurals may be used with numerals, though they would be much less commonly so used. For mere enumeration, it is the singulative that is used. The singulative, can, however, be defined more rigorously as:
 - (i) the singular form of countable nouns;
 - (ii) the form with suffix -it of uncountable nouns (one certain example only attested);
 - (iii) the form with suffix -at of uncountable nouns (quite the commonest type of singulative);
 - (iv) the form with suffix -ay of uncountable nouns that have NO form with the suffix -ät.

Under the headings of (iii) and (iv) must be included forms of nouns which have no (unsuffixed) singular forms, but whose lexically quotable form (always a singulative) has one of the two suffixes.

- (i) Examples of singular forms of countable nouns have already been noted. e.g. färäs 'a horse'. This form is used with numerals—woro/säläs/sälasa färäs 'one/three/thirty horse(s)'.
- (ii) Only one example of the suffix -it as a singulative where the noun is uncountable was noted:

gar affairs garit an affair

There are several nouns whose lexically quotable form has the ending -it—e.g.

čəb'it fingertälit she-goatkorit a ball

But these can all be treated as singular forms with a final t, not the

suffix -it. For there are examples of all the long vowels +t at the end of singular forms, even where t does not occur in the plural form, and is, therefore, not a radical. Though it is possible to treat some of these as having the suffix -it, it would be less reasonable with others, e.g. korit, where the i is clearly part of the radical formation (plural $k\ddot{a}w\ddot{a}rri$). But in no case is there any gain in simplicity—on the contrary, if -it is a suffix in the first two examples we shall require the new double suffix $-it\ddot{a}t$ in $\dot{c}ab'it\ddot{a}t$, $t\ddot{a}lit\ddot{a}t$; this, and its accompanying formation rules, are unnecessary if the quoted forms are treated as the singulars (unsuffixed in respect of the derivative suffixes), and not as forms with the suffix -it.

(iii) The vast majority of uncountable nouns have a singulative form with the suffix -ät. The suffixed form must be feminine, in view of the suffix, though the corresponding singular (unsuffixed, collective) form may be of either gender (though it is almost always masculine).—e.g.

gim (f.) clouds gimät a cloud fəḥam (m.) charcoal fäḥmät a piece of charcoal

We must place with these the forms with suffix -\(\delta t\) of the nouns which have no singular forms—the form with -\(\delta t\) being lexically quotable—e.g.

wə'ät a cow

- (iv) There are a few nouns which have a singulative form with the suffix -ay (and no form with -ät). These are limited to:
 - (a) a class of nouns referring to insects—e.g.

čibnitsčibaya nitqənqənweevilsqənqənnaya weevil

(b) a class of nouns referring to trees where the suffixed form has the meaning 'a piece of ... wood'—e.g.

çõ'eacaciaçõ'etaya piece of acacia woodwägreolivewägretaya piece of olive wood

(the forms with the suffix -ät are also singulative with the meaning 'a...tree')

¹ Cf. §§ 4.2.3 and 4.2.5.

(c) a class of nouns referring to joints of meat, where the suffixed form has the meaning 'a piece of . . .'1—e.g.

qəlčəm shin qəlčəmmay a piece of shin tädə' breast bone täd'etay a piece of breast bone

(d) a class of nouns which have no unsuffixed singular form, but a lexically quotable form with the suffix -ay—e.g.

bəllay a cloth märday a sharp point

The suffixes $-\ddot{a}t$ and -ay are marks of the diminutive as well as the singulative, though the definition of the two classes is different. But there are also morphological characteristics that are largely associated with the singulatives, notably the rarity of the vowel e (common with diminutives), the frequency of vowel change involving central vowels in the suffixed form (rare with the diminutives) and frequency of gemination (rare with the diminutives unless accompanied by e).

In detail the features associated with the singulatives are set out in the following paragraphs.

(a) Most of the forms have only the suffix, and none of the other features (except the -t- of juncture)—e.g.

muzbananasmuzäta bananahämlevegetableshamletäta vegetable

(b) With nouns with singulars of the structure $C \partial C C \partial C$, the final radical is geminated—e.g.

qənqən weevils qənqənnay a weevil
dəgdəg land at higher dəgdəggät a field at a higher
level level

We may compare the form of a noun with no singular:

tənkəllät a plait

(c) If the singular form ends in -a, the suffix replaces (is not additive to) this vowel—e.g.

šägla figs *šäglät* a fig baldänga beans baldängät a bean

(d) The patterns CäCCäC, CaCCäC, CäCäCät, and CaCCä-Cät, involving a change of vowel, and, in the last case, gemination,

are regularly found with nouns whose singular form is of the type $C \ni C \ni C$, $C \ni C \ni C \ni C$, and $C \ni C \ni C \ni C$. The following related patterns were noted:

(23)	bəläq	big rocks	bälqät	a big rock
(4)	ğəlab	dhows	<i>ğälbät</i>	a dhow
(9)	tämär	dates	tämrät	a date
(21)	mədäd	grindstones	məddät	a grindstone
(1)	'əbən	stones	'əbbänät	a stone
(3)	çəgär	hair	<i>čəggärät</i>	a hair
(2)	ğəban	coffee-pots	<i>ğäbänät</i>	a coffee-pot

The following have singulative forms of the same structures, but do not involve vocalic change (except the absence of ∂ , which is conditioned by the syllabic structure).

(3)	nəhəb	bees	nəhbät	a bee
(5)	wärəq	silver	wärqät	a piece of silver1

(e) Forms with the vowel e were rare and confined to: four nouns of the following pattern, all names of trees (unidentified):

<u>h</u>älqa <u>h</u>älqetät

nouns with singular forms of the structure CVCCVC with the vowel a in the second syllable—e.g.

källat earthenware källetät a piece of earthenware ware

the following noun, whose singular form is historically a broken plural:²

'äs'ən shoes 'äs'enät a shoe

(f) An idiosyncratic pattern is that of:

fäləş wood fəllaşay a piece of wood

6.3.3. Diminutives. The diminutives are defined as those forms which have the same gender as the singulatives, but an additional suffix.³ 'Additional' is to be taken to refer to the suffix -ätit as

¹ For the classification of these forms see § 6.3.9.

² Cf. Tigrinya sa'ni, 'as'ən. Another such form in Tigre is 'änğab (singulative änğebät) 'teeth'.

³ And is also a singular-type derivative (cf. § 6.2.2). Plural-type derivatives are not dealt with until § 6.3.7.

compared with -ät, and also to the suffix -etay as compared with -ay. It follows that there are four possible suffixes that mark the diminutives:

- (i) -ät where the singulative form has no suffix (is the singular) and is feminine;
- (ii) -ay where the singulative form has no suffix (is the singular) and is masculine:
- (iii) -ätit where the singulative form has the suffix -ät and either the (unsuffixed) singular form is collective, or there is no singular form—the form in -ät being lexically quotable;
- (iv) -etay where the singular form has the suffix -äy (and is the lexically quotable form, there being no singular form—there is no example of a noun with a collective singular form and a singulative in -äy that also has a diminutive in -etay)—e.g.

	(Coll.)	Singu	ılative	Din	ninutive
(i) (ii)	, ,	kərən (f.) nəhəs (m.)		kərrenät nəḥesay	a little voice a little house
(ìii)	(fəḥäm)		a piece of charcoal	fäḥmätit	a little piece of charcoal
(iv)		wə'ät bə'ray	a cow an ox	wə'ätit bə'retay	a little cow a little ox

There is one further possibility—the forms with female reference and the suffix -t or -at have a diminutive with the further suffix $-it^2$ —e.g.

'ädgət a she-donkey 'ädgətit a little shedonkey

The diminutive forms are quite common in Tigre. Typical usages are:

gäle mähgezay bəye. There is a little thing I need (lit. I have a small need).

wälwelay räkäbna. We have found a breath of air.

Other forms have quite specific uses. Betätit, for instance, the diminutive of bet 'a house', may be used to refer to a ticket office.

¹ Cf. § 6.2.1. ² Cf. § 6.1.3.

Features associated with the diminutives (and in which they are often to be contrasted with the singulatives) are the frequency of the vowel e, and the rare occurrence of gemination except when accompanied by this vowel and the rare occurrence of any vowel change other than that which involves e.

In cases (iii) and (iv) above, however, where the singulative form has a suffix and the diminutive a double suffix, the diminutive does not differ from the singulative in respect of its vowels and gemination but solely in the suffixes, as the forms above illustrate. There, are, however, two points that must be made about the double suffixes. First, under certain conditions these double suffixes have the function of the corresponding single suffixes—they are marks of the diminutive where the (unsuffixed) singular form is the singulative; that is to say that there are no forms with single suffixes at all; it is the double suffixes that mark the diminutives. Examples of this are given in the detailed statement below. Secondly, there are a few examples of nouns which have singulative forms with the suffix -av, and no unsuffixed singular form (the form with -av being lexically quotable), but whose diminutive form does not have the suffix -etay, but the ending -eyay (i.e. the suffix -ay is treated as if it were part of the stem)-e.g.

tästay a bull tästeyay a little bull

(but bə'ray, bə'retay—and the plural of tästay is tästot, the regular form for nouns with lexically quotable forms in -ay). 1

For all other forms the position with regard to vowel quality and gemination is set out below in detail.

(a) Where the vowel of the last syllable of the singular is a long vowel other than a, the diminutive form has a suffix only and none of the other features—e.g.

kis	a pocket	kisay	a little pocket
sor	a load	şoray	a little load
'ämur	a milk-pail	'ämurät	a little milk-pail
bayḥot	a jackal	bayḥotät bayḥotay	a little jackal
'əde	a hand	'ədetät	a little hand
šəllu	a squirrel	šəllutay	a little squirrel

¹ Cf. § 5.2.2.

An exception in which the diminutive form has a double suffix is:

dəmmu a cat dəmmätit a little cat (but also dəmmutay)

(b) Where the singular form has a as the vowel of the last syllable the diminutive has, in its place, e—e.g.

fas	an axe	fesay	a little axe
'əwan	a period of time	'əwenät	a short period of time
kərbağ	a whip	kərbeğät	a little whip
ğəna	a child	ğənetät	a little girl
		ğənetay	a little boy
məgda	a bonfire	məgdetay	a little bonfire

Some forms with the double suffix $-\ddot{a}tit$ were also noted. Except for the first example below, all have this suffix as a replacement of the final -a of the singular. None have the vowel e—e.g.

qal	a word	qalätit	a little word
higa	a speech	higätit	a little speech
walta	a shield	waltätit	a little shield

(c) Where the singular form has \ddot{a} or ϑ as the vowel of the final syllable (which must be a closed (CVC) syllable in view of the short vowels), the diminutive has the vowel e and, where the singular is of the structure CVCVC, gemination of the second radical also—e.g.

hələğ	an anklet	ḥəlleğay	a little anklet
färäs (m.)	a horse	färresay	a little horse
(f.)	a mare	färresät	a little mare
məsgəd	a mosque	məsgeday	a little mosque
mäkfän	a shroud	mäkfenay	a small shroud

Exceptions to this are:

(i) With feminine forms there is often no e vowel, and the suffix is in some cases -ätit—e.g.

ʻälləş	a hawk	ʻälləşät	a little hawk
'əndər	a flute	ʻəndərätit	a little flute

There are a few examples of alternative forms:

kämfär	a lip	_ ,	a little lip
ʻärqäb	a scorpion	kämfärätit 'ärqäbät 'ärqebät	a small scorpion

(ii) Where the singular form is monosyllabic (CVC) with either ϑ or \ddot{a} as its vowel, the diminutive has the suffix $-\ddot{a}tit$ or -etay. In most cases the stem structure is, for these diminutive forms, CVCC- (with morphologically three radicals), as we have already seen in dealing with the plural forms. $^{\text{I}}$ —e.g.

gəd	a cotton thread	gəddetay	a small cotton
			thread
ʻən	an eye	'əntätit	a little eye

But three forms were noted that are exceptional to the general pattern. The first has the stem structure CVC- (not CVCC-) even in the suffixed form:

təb a breast təbetay a little breast

The second has the stem structure CVCC-, but the third C differs from that which is established as a radical in the statement of the plurals:²

qär a horn qärretay a little horn

The fourth is wholly idiosyncratic in its entire morphology:3

wäd a son wälleday a little son

(iii) Where the last radical, or, in the case of CVCVC singular forms, either of the last two radicals, is a laryngeal, the diminutive has the suffix -ätit or -etay—e.g.

säf '	a winnowing	säf'etay	a little winnowing
	tray		tray
mə'äs	a hide	mə'äsetay	a little hide
məḥbəʻ	a hiding place	məḥbəʻätit	a small hiding
			place
mäftəḥ	a key	mäftəḥetay	a small key

¹ Cf. §§ 4.2.1 (vi), 5.2.3 (v), and 7 (iv).

Not *qärnetay (but 'äqərnät); also qärru (§ 7 (iv)).
 Cf. §§ 4.2.6 (iii) and 7 (vi).

Where the larvngeal is 'and the previous vowel is u, the forms are:

bəggu'	a sheep	bəggə'utay	a little sheep
kərku'	a piece of ear-	kərkə'utat	a little piece of ear-
	wax		wax

(d) The only forms with gemination and a change of vowel other than to e that were noted are:²

soțal	a curved dagger	sotəllay	a small curved
· ·			dagger
rošan	a storied	rošənnätit	a little storied
	building		building
šokän	an antelope	šokənnät	a small antelope
šeṭan	a devil	šeţənnay	a little devil

(e) There were two examples in which the diminutive (semantically defined) differed from the singulative in having the vowel e:

(qənqən)	qənqənnay	a weevil	qənqenay	a little weevil
(fäləş)	fəllaşay	a piece of wood	fəlleşay	a little piece of
				wood

6.3.4. Double diminutives. The double diminutives are defined as forms with a suffix additional to the diminutive. All, in fact, have the suffix -ätit, compared with -ät of the diminutive—e.g.

fanus	a lamp		
fanusät	a little lamp	fanusätit	a tiny lamp

6.3.5. Pejoratives. The pejoratives are defined as forms with a gender different from that of the singulative, but with an additional suffix. With two exceptions only (the first two exemplified) the suffix is -ay or -etay. 'Additional' is to be taken here to refer not only to -ät or -ay where the singulative has no suffix, but also to -etay where the singulative has the suffix -ät³—e.g.

'anas (m.)	a man	'ənesät	a	weak	man
` ,		(dim. 'ənesa	v)		

¹ Cf. § 1.8.

² There is a similar diminutive plural—hesassat (hesas 'rancid butter').

³ Cf. § 6.2.1. One form, səmmetay, was noted though no singulative was recorded—the collective being səm 'poison'. A singulative *səmmät can be 'reconstructed', though the double consonant is absent from the form with pronominal suffix, cf. § 7 (iv).

nəssal (m.)	a tongue	nəsselät	a sharp tongue
		(dim. nəsse	lay)
'əssit (f.)	a woman	'əssitay	a bad woman
		(dim. 'əssit	ät)
märwäd (f.)	a ring	märweday	a poor ring
` '	· ·	(dim. <i>mära</i>	wedät)
täwlät	a table	täwletay	a poor table
		(dim. täwle	•

The phonological characteristics of the pejoratives are similar to those of the diminutives, except that under conditions where the vowel e is regularly to be expected, it always occurs with the pejorative, even if absent with the diminutive—e.g.

Where the final radical is a laryngeal, the pejorative has the double suffix -etay (diminutive -ätit)—e.g.

But there are many problems of the relation between the semantic and formal classes.

(a) Many forms that are, by the formal criteria stated, diminutives, have the meaning assigned to the pejoratives—e.g.

gor (m.)	a neighbour	goretay	a bad neighbour
mämba (m.)	a master	mämbetay	a bad master
mändäq (m.)	a wall	mändeqay	a ruined wall

(b) There are a few nouns with two diminutive forms (formally) one with the vowel e, the other without. The latter has the meaning of a diminutive, but the former that of a pejorative—e.g.

dərfən	a ram	dərfənnay	a little ram ¹
		dərfenay	a poor ram
ʻənkər	a puppy	'ənkərray	a little puppy
		ʻənkeray	a weak puppy

¹ Used often to refer to a strong young boy.

(c) Some nouns whose singular form is either masculine or feminine have two diminutive forms (formally), but while the feminine form has the meaning 'a little...' (or 'a nice little...') the masculine form has the meaning 'a poor...'—e.g.

higa	a speech	higätit	a nice little speech
(m/f.)		higetay	a poor speech
mora	a stick	morätit	a nice little stick
(m./f.)		moretay	a useless stick

(d) One noun was noted with a form that formally is augmentative (different gender from the singulative and different, but not additional, suffix), but semantically is pejorative:

(kərbit) kərbität a match kərbitay a spent match

6.3.6. Augmentatives. The augmentatives are defined as the forms with a gender different from that of the singulative and with a different, but not additional, suffix—e.g.

It follows that the augmentatives are found only with nouns that have a singulative with the suffix $-\ddot{a}t$ (for there are no augmentative forms where the singulative has the suffix -ay), and are thus either nouns whose singular forms are collectives (with a singulative in $-\ddot{a}t$), or nouns with no unsuffixed singular form, but a lexically quotable form in $-\ddot{a}t$.

The phonological features of the augmentatives are the same as those of the singulatives, with one exception—different consonants are geminated in the following forms:

There is one form which is semantically but not formally an augmentative:

qəlčəmmay a strong wrist

This would be formally an augmentative only if there were a singulative *qəlčəmmät. But the other forms are:

(sing.)	qəlčəm (f.)	a wrist
(pej.)	qəlčemay	a weak wrist
(dim.)	gəlčəmmätit	a little wrist

6.3.7. *Diminutive plurals*. The diminutive plurals are defined as the plural-type derivatives with the same gender as the singulative. This definition is strictly valid only for animate nouns, the possibilities being:

-at where the singulative form is feminine-am where the singulative form is masculine

In the case of inanimate nouns a similar statement of gender correlation cannot be made since the plural-type derivatives are mostly, like the plurals, masculine singular in their concord. But the suffixes are the same as in the case of the animate nouns—at for feminine singulative forms and -am for masculine singulative forms. The strict definition of the diminutive plurals is, therefore, forms with suffixes whose number and gender, if generalized from the animate forms, is plural and (in the case of gender) the same as that of the singulative form—e.g.

gämäl (m.s.)	a male camel	gämmelam (m.p.)	a few male
			camels
wə'ät (f.s.)	a cow	wə'at/wə'etat(f.p.)	a few cows
kis (m.s.)	a pocket	kisetam (m.s.)	a few pockets
rošan (f.s.)	a storied	rošənnetat (m.s.)	a few storied
	building		buildings

The phonological characteristics of these forms are as follows:

- (a) Where the diminutive form has an e vowel, the diminutive plural has the same pattern as that form. This may include gemination as illustrated by gämmelam above—diminutive gämmelay.
- (b) Where the diminutive has no e vowel, the diminutive plural has this vowel in the form of the endings -etam and -etat, though retaining any other characteristics of the singulative. This is

It is, perhaps, relevant that the singular form qəlçəm is also collective with the meaning 'shin' (meat), cf. § 6.3.1 (ii).

illustrated by kisetam and rošənnetat above—diminutives kisay and rošənnätit. But there are some exceptions to this.

(i) Most nouns with a singulative form with suffix -ät (whether this is the lexically quotable form or there is an (unsuffixed) singular (collective) form) have diminutive plurals with the suffix -at only—e.g.

only—e.g. $w_{\vec{\sigma}}$ 'ät a cow $w_{\vec{\sigma}}$ 'at a few cows $(g_{\vec{\sigma}}r\ddot{a}h)$ $g\ddot{a}rh\ddot{a}t$ a field $g\ddot{a}rhat$ a few fields

(ii) For the noun dəmmu alternative forms were noted as follows:

(dim. dəmmätit) dəmmetat/dəmmutat a few (she-) cats (dim. dəmmutay) dəmmetam/dəmmutam a few (tom-) cats

(c) Many diminutive plural forms have the stem structure of the broken plurals, with the vowel e when the plural has a in its final syllable—e.g.

(färäs) 'äfras horses/mares 'äfresat a few mares 'äfresam a few horses (ğəna) 'ağännit children 'äğannitam a few children

For nouns whose third radical has the consonantal exponent of y in the plural² the vowel e replaces the sequence e and e are e.

(näwid) näwayəd kids näwedat a few kids näwedam (gäzirät) gäzayər islands gäzerat a few islands

6.3.8. Pejorative plurals. The pejorative plurals are defined as the second of the two types of forms with suffixes that may have plural concord, and specifically with suffixes that imply (in the case of animate nouns) a gender different from that of the singulative. All except one have the suffix -am (the singulative being feminine), and all are found together with a diminutive plural form with suffix -at—e.g.

wə'ät wə'etam some poor cows a cow (dim. pl. wə'etat) some poor storied rošan a storied rošənnetam buildings building (dim. pl. rošannetat) some poor islands an island gäzeram gäzirät (dim. pl. gäzerat)

1 Wa'etat also attested.

² Cf. § 4.2.4.

One form only with the suffix -at was noted—säbetat 'some weak men'. This is to be related to säb 'men', which is lexically the plural of 'anas 'man' (m.s.).

It must be added that there are pejorative plural forms only where the singulative form is of one gender. For a noun whose singular forms are either masculine or feminine the forms with the suffixes -am and -at are diminutive plural, and differ in sex reference, this difference being related to gender in all the other forms of such nouns—e.g.

- 6.3.9. Problematic forms. There are a few nouns whose forms raise some problems of classification. The problem is partly that of distinguishing between collective and plural, but is made more complex by some morphological features not previously encountered.
- (i) Mention has already been made in the phonological section¹ of the first of the following:

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'äqqäč soldiers 'äqqäytay a soldier
'älläč foreigners 'älläytay a foreigner
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If we treat \check{c} as morphologically equivalent to yt these can be treated as collective and singulative respectively. But there are two points against this solution. First, ' $\ddot{a}qq\ddot{a}\check{c}$ and ' $\ddot{a}ll\ddot{a}\check{c}$ have plural concord; it will be necessary to state that some collective forms (if these are to be collective) have this type of concord. Secondly, they are both of the pattern of plural class XXI; this is, however, not a very strong argument in favour of treating them as plural, because the forms in -ay have the same stem structure, and there are no other examples of -ay forms with a plural type stem structure.

(ii) A noun with similar features but a suffix -tay is:

'äggär hunters 'äggärtay a hunter

The unsuffixed form has plural concord; the stem structure is that of plural class XXI.

(iii) Also with a suffix -tay is:

šəḥār magicians šəḥərtay a magician

Also attested, however, was the singular form šəḥər. Taken together with this šəḥär can only be regarded as a broken plural—of class XX, and not as a collective.

(iv) Two forms with the suffix -ebay were noted:1

dällalebay agent, middle man säqqatebay merchant

These forms are certainly singulatives. The forms with plural concord are:

dällal or dälalib agents, middle men šäqqat merchants

Both nouns have alternative forms with singular concord—dällal (the same as that with plural) and šäqqatay. The form dälalib is clearly a broken plural, but, while dällal and šäqqat are of the pattern of plural class XXI, their status remains in doubt.

(v) Nouns referring to members of tribes, speech communities, &c., often have three forms, one with no suffix and masculine plural concord, one with suffix -ay and masculine singular concord, and the third with suffix -ayt and feminine singular concord. The first refers to more than one and the second and third to male and female persons respectively. The unsuffixed and suffixed forms have, in some cases other differences too; these can only be stated lexically and are illustrated in the examples—e.g.

mänsä'	mänsə'ay	mänsə'ayt	Mensa Tigre speaker
'ämḥara	'ämḥaray	'ämḥarayt	Amharic speaker
balen	bəlenay	bəlenayt	Bilin speaker
<u>ḥ</u> äbäš	<i>ḥäbäšay</i>	<u>ḥäbäšayt</u>	Tigrinya speaker
<u></u> ḥämäsen	ḥämäsenay	<u></u> ḥämäsenayt	Hamasien Tigrinya speaker
märya	märyay	märyayt	member of Marya tribe

The unsuffixed forms, it will be noted, do not fall into the usual plural patterns.

(vi) Another noun with one form that has plural concord, and another with the suffix -ay and singular concord is:

šəmagälle nobles šəmagällay a noble

(vii) Some other nouns, mostly indicating nationality, have an

¹ Cf. also § 8.3.

unsuffixed form with plural concord, and a form with the ending -i that has singular concord—e.g.

ʻäskär	soldiers	ʻäskäri	a soldier
ṭilan	Italians	ṭilani	an Italian
'ingliz	Englishmen	'inglizi	an Englishman

(viii) Closely associated with the problem are some forms that have already been dealt with as collectives and singulatives respectively. These are the singular forms of the pattern C
i C
i C
i C which are collective, with a singulative with the suffix $-
i t^{\text{T}}$ —e.g.

zəbäd	butter	zəbdät	a piece of butter
dəmäq	skulls	dämqät	a skull
čəgär	hair	čəggärät	a hair
'əbär	needles	'əbrät	a needle

There are strong arguments for treating the unsuffixed forms of these not as collectives, but as plurals:

- (a) they have the syllabic and vocalic pattern of class XX plurals, cf. 'aban, 'aban 'stone', 'stones';
- (b) one, at least, a form of an animate noun, has plural (and feminine) concord:

kəwäk black snakes kukät (kəwkät) a black snake

(c) most of them have reference to more than one object—'grindstones', 'umbrellas', 'tents', &c.2

But if we treat these unsuffixed forms as plurals, there would be a case for treating the unsuffixed forms of the following as plurals too:

ğəlab	dhows	<i>ğälbät</i>	a dhow
ʻəday	debts	ʻäydät	a debt
ğəban	coffee-pots	ğäbänät	a coffee-pot
wəraq	paper	wäräqät	a piece of paper

The morphological and the semantic relations between the paired forms are very similar to those considered above. But it would be much less convenient to treat these as plurals since

(a) the unsuffixed forms do not belong to any recognized plural pattern;

¹ p. 52, § 6.3.2. ² Cf. Vocabulary, pp. 78–79, for more examples. (b) some of the nouns have plural form—with either a similar or a different meaning—e.g.

ğäbänotat coffee-pots wäräqotat pieces of paper

It is clear that, in general terms, the singular/plural and singulative/collective relations are not clearly distinguished in Tigre. But in a descriptive statement we can make precise distinctions by treating all the unsuffixed forms that we have been considering as collectives and the others as singulatives. This requires that two points be made:

- (a) some collectives have a meaning that is identical with that of the plural;
- (b) some collectives (all with plural meaning) have plural concord.

The difficulties arise, perhaps, from two sources. First, some of the broken plurals are historically collectives. Secondly, in the neighbouring Cushitic language Bilin most nouns have two forms, one with a suffix, the other without, and it is the unsuffixed form that is 'plural'. In some dialects of Tigre forms which for my informant are singular and singulative are used with plural reference, a further 'singular' or 'singulative' form having the Bilin type suffix $-a^3$ —e.g.

dəgəm stories dəgma a story

A similar feature is to be found even in one dialect of Tigrinya,⁴ with a singulative suffix -i, which has feminine concord, even with reference to males—e.g.

də'ul bulls hanti də'uli one bull⁵

² Cf. 'Noun in Bilin', 385-7.

⁴ Agame dialect, informant from Adigrat.

¹ Cf. Dillmann and Bezold, Ethiopic Grammar, 299 seq.

³ Informant Mohamed Ali of Anagit.

⁵ But the nearest parallel to Tigre is in Galla, cf. B. W. Andrzewski, "The categories of number in noun forms in the Borana dialect of Galla', *Africa* xxx. I (1960), 62–75.

PRONOMINAL SUFFIXES

THE pronominal possessive suffixes may occur with any of the forms described in the previous sections. In general they may be treated as additive; they are set out in the table below:

••	Singular	Plural
3 masc.	u	om
3 fem.	a	än
2 masc.	ka	kəm
2 fem.	ki	kən
I masc./fem.	уe	na

The second masculine plural form kəm contains a short, back, close vowel. Only in such forms (and in similar forms of the verb) is there need to recognize a vowel that is both short and back (or front). Strictly another symbol is required if all symbols are to be unambiguous without taking their contexts into consideration; but a may be used without ambiguity if (as is almost always the case) the ending can be recognized as the suffix.

There are a number of features regarding the juncture of stem and suffix that must be noted.

(i) If the unsuffixed form (unsuffixed, that is, in regard to the pronominal suffixes) ends in a vowel, there is a juncture feature h with all suffixes that begin with a vowel—e.g.

mora	stick	morahu	his stick	
<i>fəre</i>	fruit	fərehän	their (fem.) frui	it

(ii) With the first singular suffix there is a juncture feature of palatalization, if the unsuffixed forms ends in a dental or alveolar consonant. The suffix has the exponent of gemination and palatalization of the final consonant of the unsuffixed form. The consonants involved are set out and illustrated in:

t/\check{c}	bet	house	bečče	my house
$d/{g}$	wəlad	sons	wəlağğe	my sons

•

t/\check{c}	səmət	side	səməčče	my side
s/š	rə'əs	head	rə'əšše	my head
$z \check{z}$	məḥäz	river	məḥäžže	my river
ş/č	fäləş	piece of wood	fäləčče	my piece of wood

(iii) As was noted in the phonological section, a final \check{c} has the morphological function of -yt. This is clear from

'äqqä $\check{c}^{_1}$ soldiers 'äqqäytu his soldiers and from forms with plurals in the suffix -ä $\check{c}^{_2}$ —e.g.

'äbäč father/paternal uncle 'äbäytu his father and/or paternal uncles

There are alternative forms for the last—'äbäčtu and 'äbäču.

(iv) As was noted in the section on broken plurals, many singular forms of the structure CVC with V a short vowel are morphologically to be treated as CVCC. In most cases the last two (morphologically speaking) consonants are the same:

sər	vein	sərru	his vein
gäd	luck	gäddu	his luck
qär	horn	qärru³	his horn
cf. səm	a name; poison	səmu ⁴	his name; his poison
däm	blood	dämu	his blood

In other cases the final consonant differs (but is always a dental and the preceding one is always dental or alveolar)—e.g.

gən	border	gəndu	his border
'ən	eye	'əntu⁵	his eye
häl	maternal aunt	hältu	his maternal aunt

There are similar features with a few non-monosyllabic singulars—e.g.

wälät	daughter	wälättu	his daughter
nə'äl	sister-in-law	nə'älta	her sister-in-law
kərən	voice	kərəntu	his voice

All the forms with an additional -t- are feminine, and in one

¹ Cf. §§ 1.3 (iv) and 6.3.9 (i).

^{* § 5.2.1.}

³ Not *qärnu, cf. §§ 6.3.3 (p. 56) and 4.2.1 (vi).

⁴ In spite of 'asmay (§ 4.2.2) and sommetay (§ 6.3.5, p. 57, n. 3).

⁵ Cf. §§ 5.2.3 (v.) and 6.3.3 (p. 56).

example the occurrence of this -t- distinguishes otherwise identical forms that differ only in gender (with a distinction in sex reference):

bə'älu (m.f.) owner bə'älu (m.) his (male) owner bə'ältu (f.) his (female) owner

There is a similar distinction, but with a difference in vowel (though the only *phonetic* difference is in duration since both are open front) in:

hal (m.) maternal uncle
 halu his maternal uncle
 häl (f.) maternal aunt
 hältu his maternal aunt

With the first singular suffix there is palatalization, though without gemination of the additional t, since in these cases this would imply a cluster of three consonants—e.g.

'ən eye *'ən če* my eye *wälät* daughter *wäläčče* my daughter

A rather different feature is the occurrence of -t- with the feminine plural suffix $-\ddot{a}n$, with a few broken plurals of the pattern $\ddot{a}CC = C$ (class I)—e.g.

(bə'əs) 'äb'əs husbands 'äb'əstän their husbands (rə'əs) 'är'əs heads 'är'əstän their heads

(v) Three nouns (those that have plurals in $-\ddot{a}\ddot{c}$) have suffixed forms with a medial u and, as a result, the juncture h with suffixes beginning with a vowel—e.g.

'äfmouth'äfuyemy mouth'äbfather'äbukayour fatherhämfather-in-lawhämuhuhis father-in-law

(vi) The noun wäd has the stem wäl- with all suffixes that do not begin with a vowel, but wädd- (as sər, &c., above) for those that begin with a vowel:

wäd son wälye my son wälka your son wäddu his son

¹ Cf. §§ 4.2.6 (iii) and 6.3.3 (p. 56). It is clear that wäd may be regarded as morphologically a triliteral with radicals w, l, and d.

(vii) The clusters -gk- and -qk- are possible at this stem-ending juncture only—e.g.

hog elbowsuqshophogkayour elbowsuqkayour shop

But while -gk- may often have no voicing (and could thus be written -kk), the ejection of -qk- is always phonetically present in glottal closure.

(viii) The cluster -yy- (not gemination) is also possible only at this type of juncture—e.g.

'əčyay a piece of wood 'əčyayye my piece of wood

ADJECTIVES

THE adjectives fall into several morphological classes. The two most obvious main divisions are those which have broken plurals and those whose plurals are suffixed. The former make no distinction of gender in the plural form, while the latter have distinct masculine and feminine plural forms. Several adjectives that do not have distinct masculine and feminine singular forms were noted.

8.1. Adjectives with broken plurals

The classification of these adjectives is partly in terms of the type of plural, but also in terms of the feminine form.

(i) The commonest type of adjective with a broken plural has a masculine singular form $C\ddot{a}CiC$, a feminine singular $C\ddot{a}CCaC$, and a plural of the type of broken plural class XI with one radical that has vocalic and consonantal exponents—e.g.

(10) gäzif gäzzaf gäzayəf thick

With these can be included the following (the final i being interpreted as $-\partial y$):

(1) 'äbi 'äbbay 'äbayi big

With the same plural form, but a feminine with the suffix -ät, is:

(2) wäğib wäğibät wäğayəb fertile

This is also the pattern of two adjectives with a masculine singular $C\ddot{a}CuC$:

(2) gädud gädudät gädayəd barren

This type of plural is also found with some adjectives whose masculine singular form is of one of the types that is most commonly associated with a suffixed plural. Details are given in the sections below.

(ii) A plural of the type of class XIV (CäCäCCoC) was noted

for a few adjectives with a masculine singular CVCCVC. The feminine singular has the suffix -ät or -it—e.g.

(2) ḥänkiš	<u> ḥänkišät</u>	<u></u> ḥänäkkəš	with a limp
(1) gəndab	gəndabit	gänäddəb	old
(1) dəgläl	dəglälit	dägälləb	old

- (iii) Plurals of the type of the rare class XXI (CäCCäC) were noted only as alternatives to those of § 8.2 (i) below.
 - (iv) Other broken plurals that were noted are:

	m.s.		f.s.	m./f. p.	
III		färəd		'äfrad	odd, single
III		fänäk		'äfnak	brave
XI	fädab		fädabit	fädayəb	brave
XII	ḥäwan		ḥäwanit	<i>ḥäwawin</i>	unfertil e
XIV		<i>ḥəmrarib</i>		<u></u> ḥämärrəb	heroic
XVI		sä'da		sə'adi	white
XVII	qayəḥ		qäyaḥ	qäyḥit	red
XVII	sənu'		sən'ət	sän'it	noble
XVIII			ʻämsat	ʻämässi	pregnant

8.2. Adjectives with suffixed plurals

Most of the adjectives that have suffixed plurals are morphologically verbal formations—participles. The plural suffixes are -yam (masc.) and -yat (fem.) or -am and -at.

- (i) Adjectives with a final closed syllable containing the vowel u have plural suffixes -am and -at. But there are four different subclasses:
- (a) Most of the adjectives have in the feminine form the suffix $-\partial t$, and ∂ or no vowel (according to syllabic structure) in place of u—e.g.
 - (1) hud hədət hudam hudat few (18) kəbud kəbdət kəbudam kəbudat heavy (6) dəngur dəngərət dənguram dəngurat slow
- (b) Others have no suffix in the feminine form, but still ϑ in place of u—e.g.
 - (4) 'əwur 'əwər 'əwuram 'əwurat blind (1) gərrum gərrəm gərrumam gərrumat beautiful

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(c) Where a laryngeal is the final radical, the vowel u does not occur in any of the suffixed forms—e.g.

(7) bəzuḥ bəzhət bəzḥam bəzḥat many

(d) Where the final radical is y, the feminine form has the ending -it (= -y t or - y y t)—e.g.

(1) şəruy şərit şəruyam şəruyat clean (2) 'əkkuy 'əkkit 'əkkuyam 'əkkuyat bad

One adjective with singular forms of the type illustrated in (a) but with only a broken plural was noted:

nə'uš nə'əš nə'ayəš small

Broken plurals of this type (class XI) and of the type of class XXI were also noted as alternatives to the suffixed plurals—e.g.

(4) kəbud kəbdət käbayəd heavy (3) şəgub şəgbət şäggab rich

Almost all the adjectives of the type dealt with in this section are morphologically participles, and most of them Passive participles. There is in theory, at least, a participle for every 'theme' or 'derived form' of the verb, and all except that of the active have a final closed syllable containing the vowel u. The theoretically possible forms may be exemplified by the verb $q\ddot{a}tla$ 'he killed':

qə tul	Passive	tqättäla
'əqtul	Causative	'äqtäla
'əttəqtul	Double Causative	'ättäqtäla
qutul	Reciprocal	tqatäla
'ətqutul	Causative Reciprocal	'ätqatäla
qətutul	Frequentative Active	qätatäla
-	Frequentative Passive	tqätatäla
'ətqətutul	Frequentative Causative	'ätqätatäla

(ii) Adjectives with a masculine singular form of the structure CaCaC have plural forms with the same suffixes, but feminine singular forms with the suffix $-\ddot{a}t$ —e.g.

(11) haməq hamqat hamqam hamqat weak

These are also participles—the Active participles. A few adjectives

with the same type of masculine singular form have plurals with the suffix -otat—e.g.

- (2) hayəs haysät haysotat noble
- (iii) Most adjectives with stem-final syllable *CaC* have the suffixes -it, -yam, and -yat. Many of these adjectives refer to personal physical characteristics—e.g.
- (9) ¿äggar ¿äggarit ¿äggaryam ¿äggaryat hairy Two adjectives have similar suffixes, but an alternative masculine singular form with the suffix -ay:

har/haray harit haryam haryat last qädam/qädamay qädamit qädamyam qädamyat first Where the final radical is y only a single y is found in the plural e.g.

- (1) gənay gənayit gənayam gənayat ugly (1) 'äbay 'äbayit 'äbayam 'äbayat hostile
- (iv) Idiosyncratic patterns were noted for:

sänni	sännet	sänyam	sänyat	good
ţal	la	ţa	litat	brown

8.3. Diminutives of adjectives

A few forms that are clearly to be treated as diminutives, both from their morphology and their meaning, were noted. They are:

nə'uš	nə'ušay	nə'əš	nə'əšät	small
d eta bur	dəburay	d u b r u t	d eg b r eg t i t	poor
ḥud	huday	ḥədət	<u> </u> hədətit	few
şəruy	şəruyay	<i>şərit</i>	sərität	clean
qərub	qərubay	qərbət	qərbətit	near

The masculine form of the diminutive has the suffix -ay, the feminine $-\ddot{a}t$, or when preceded by the suffix $-\partial t$, the suffix $-\dot{a}t$.

One masculine diminutive form was noted that has either the suffix -etay or the very rare ending -ebay.³

mäkruh mäkrəhetay/mäkrəhebay evil

¹ Cf. §§ 1.4 (i) and 7 (viii).

² Cf. the forms denoting females in § 6.3.3 (p. 53) where the diminutive suffix is -it following -t or -ət; but note that şərit is not treated as if it were *səryət (which would imply *səritit).

³ Cf. § 6.3.9 (iv).

VOCABULARY

NOUNS

ALL the forms that were noted are set out in the lists that follow with the exception of those nouns for which only one form was noted (and no morphological statement can thus be made). The following rules are employed:

- (i) The forms are grouped according to the syllabic and vocalic shape of the singular form or, where there is no singular form, of the lexically quotable suffixed form.
- (ii) Within each group the order of words is based on the order of the consonants in the list in § 1.1.
- (iii) After each headword an indication is given whether it is collective or singulative, and, if singulative, of its gender by the abbreviations c. (collective), m.s. (masculine and singulative), and f.s. (feminine and singulative). Gender is not stated for the collectives since almost all are masculine; the rare exceptions, however (which include collectives with plural concord), are noted. As stated in the texts neither gender nor the countable/uncountable distinctions are wholly rigid; all that can be stated with certainty is that, where a singular form is shown as feminine, the informant rejected masculine concord, and that where it is shown as singulative, he was unaware of any other (suffixed) singulative form. No indication is given with suffixed forms, since, as shown in the text, all are singulative, and the gender is predictable from the suffix.
- (iv) A final radical that is absent in the singular form but occurs in all other forms is shown in brackets.
- (v) Forms ending in -ay are treated as having the suffix -ay only where the morphology of the other forms implies this; in other forms this ending is regarded as part of the stem. Thus bə ray and ĕənĕay occur in different sections.
- (vi) The abbreviations used are: m. masculine, f. feminine, s. singulative (not singular), pl. plural, d. diminutive, d.d. double diminutive, p. pejorative, a. augmentative, d.p. diminutive plural, p.p. pejorative plural.

CV

hu m.s., brother, pl. häw.

CaC

dəs(s) m.s., saucepan, pl. 'ädyas, d. dəssetay.

təb m.s., breast, pl. 'ätbay, d. təbetay.
səm m.s., name, pl. 'äsmay.

səm m.s., name, pl. asmay. səm c., poison, p. səmmetay.

sər(r) m.s., vein, pl. 'äsrar, d. sərretay.

s
o q(q) m.s. provisions, d. s
o q q e tay.

C ightarrow C (cont.)

ǧən(n) m.s., demon, pl. *'äǧnan*. $g \ni b(b)$ m.s., small cave, pl. ' $\ddot{a}g b a b$, d. gəbbetay.

 $g \ni d(d)$ m.s., cotton thread, pl. 'ägdad, d. gəddetay.

 $g \ni n(d)$ m.s., border, pl. 'ägnad. 2m(m) f.s., mother, pl. 2mmat.

f(t) f.s., eye, pl. f(t)d. ʻəntätit.

hat f.s., sister, pl. häwat.

rəh/'ärwəhät f.s., soul, pl. 'ärwəhat. wəš(š) f.s., cartridge, pl. 'äwšaš, d.p. 'äwšešat.

Ca Cät¹

bə'at, cave, pl. bə'atat/bə'otat, d. bə'ätit, p. bə'etay a. bə'ay.

sə'ät, watch, pl. sə'otat, d. sə'ätit, p. sə'etay, a. sə'ay.

na'ät, female camel, pl. 'ansa, d. nə'ätit, p. nə'etay, a. nə'ay.

wa'ät, cow, pl. 'äha, d. wa'ätit, p. wa'etay, a. wa'ay, d.p. wa'at/ wə'etat.

$C\ddot{a}C$

sär(r) m.s., half, pl. 'äsrar.

 $\ddot{s}\ddot{a}r(r)$ m.s., misfortune, pl. ' $\ddot{a}\ddot{s}rar/$ šärotat.

gäş(ş) m.s., face, pl. 'ägəşşät, d. gässetay (thin, pale, face).

gä' m.s., black lizard, pl. 'äg'at/ 'äg'atat.

qäs c., fleas, s. qesay.

qäš(š) m.s., priest, pl. 'äqəššät, d. qäššetay.

qär(r) m.s., horn, pl. 'äqərnät, d. qärretay.

 $\ddot{a}f(u)$ m.s., mouth, pl. $\ddot{a}f\ddot{a}\ddot{c}$.

 $\ddot{a}b(u)$ m.s., father, paternal uncle, pl. 'äbäč ('äbäw, forefathers).

 $h\ddot{a}m(u)$ m.s., tather-in-law, pl.

häl(t) f.s., maternal aunt, pl. hältotat.

'äd(d) m.s., country, pl. 'äddotat, d. ʻäddetay.

 $w\ddot{a}d(d)(w\ddot{a}l-)$ m.s., son, pl. $w\partial lad$, d. wälleday.

CäCät

sänät, year, pl. sänotat, d. sänätit, d.p. sänetat.

nälät, female antelope, pl. nälat, double pl. nälatat, d. nälätit, p. näletay, a. nälay, d.p. näletat.

wälät(t), daughter, pl. 'äwälad, d. wälätit, p. wäletay, d.p. wäletat.

CäCay

tälay, herdsman, pl. täläč, d. tälevav.

käray, hyena, pl. käräč (but also under CäCaC).

CäCCät

'ämmät, father's sister, pl. 'ämmotat. 'ärrät, pasture land, pl. 'ärrotat, d. 'ärrätit.

CiC

šib, c., white hair, s. šibät. čib c., nits, s. čibay. kis m.s., bag, pl. 'äkyas, d. kisay, d.p. kisetam. gim c. (f.), cloud, s. gimät. lim c., cream, pl. lämyat. 'id m.s., Muslim offering to dead, pl. 'ayad. 'in f.s., spring, pl. 'ayan.

CiCät

nibät, canine tooth, pl. 'änyab, d. nibätit, d.p. anyevat, p.p. 'änye-

¹ All have a medial laryngeal, and are thus of the same pattern as the CäCät forms.

CeC

bet f.s., house, pl. 'äbyat, d. betätit, p. betay, d.p. betat/ 'äbyetat.

mes m.s., fermented honey drink, pl. 'ämyas.

CuC

ful c., ground-nuts, s. fulät, d. fulätit.

buš m.s., tea glass, pl. 'äbwaš. bun c., coffee (beans or plantation), s. bunät, d. bunätit.

tut m.s., dry sinew, pl. 'ätwat. suq m.s., shop, pl. 'äswaqat, d. (p.?) suqetay, d.p. suqetam.

zu' c., talk, pl. 'äzwə'at, s. zə'ät. šum m.s., leader, pl. šäyäm.

muz c., bananas, s. muzät, d. muzätit.

ruz c., rice, pl. 'ärwaz, d. ruzät. luh m.s., plank, pl. 'älwəhat, d. luhay.

lul c., pearls, s. lulät.

CuCät

dulät, nation, pl. dəwäl.
munät, food, d. munätit, p. munetay.

CoC

dol f.s., time, d. dolätit.
sol m.s., pad for load of head, pl.
səwäl/'äsəwlät.
sor m.s., load, pl. 'äswar, d. soray.
kor m.s., pack saddle, pl. 'äkwar.
gos m.s., side, face (of wall, &c.),
pl. 'ägwas/'ägwasat.

gor m.s., neighbour, pl. 'ägwar, d.
 (p.?) goretay.
qor m.s., depth, pl. 'äqwar.

hog m.s., elbow, pl. hawag. hol m.s., year, pl. hawal.

CoCät

šoqät, thorn, pl. 'äšwaq. qogät, kind of tree, qäwäggi.

CaC

fas m.s., axe, pl. fasat, d. fesay. far m.s., small milk-jug, pl. farat, d. feray. fal m.s., omen, pl. falat, d. felay

(unfulfilled omen).

bab m.s., door, pl. babat, d. bebay.

tal m.s., trap, pl. talat, d. telay.

dar m.s. property, pl. darat.

taf c., the grain 'taf', pl. tafat s.

taf c., the grain 'taf', pl. tafat s. tafätit.
šaš m.s., turban, pl. šašat.

kas f.s., metal cup, d. kasätit. kak m.s., crow, pl. kakat. gab m.s., vulture, pl. gabat, d. gebay.

gan m.s., owl, pl. ganat. gar c., things, s. garit. qal f.s., word, pl. qalat, d. qalätit. maş m.s., stick for cleaning teeth,

pl. maşat. maq m.s., cloth, pl. maqat. mal m.s., wealth, pl. malat, d. melay. hab m.s., bag of netting, pl. habat. hal m.s., maternal uncle, pl. halotat. 'ağ m.s., elephant's tusk, pl. 'ağat.

CaCät

sasät, side of mountain, pl. sasotat. šakät, spring with grass, pl. šakat. qaqät, lightning, pl. qaqat/qaqotat, d. qaqätit. mamät, tribute, pl. mamotat, d.

mamätit.

'adät, custom, pl. 'adotat. 'amät, year, pl. 'amotat, d. 'amätit.

CaCay

watay, musician, pl. watot, d. watetay/wateyay, d.p. watetam.

C i C V

fəre c., fruit, corn, pl. fəryat, s. fəretät, d. fəretätit.
dəhe m.s., sound, pl. 'ädhuy.

CaCV--(cont.)

čo'e c., acacia, pl. čo'etat, s. čo'etät (tree)/čə'etav (wood). mase m.s., evening, pl. 'ämsuy.

lahe f.s., molar, pl. 'älhay, d. ləhetät.

'ade f.s., hand, pl. 'adäy, d. 'adetät.

C₂C₀

kəbo c., dried dung, s. kəbotät. qəlo c., roast corn, s. qəlotät.

C₂Ca

səga c., meat, pl. 'äsgay, s. səgät, d. səgätit.

dəma c., baobab, s. dəmät.

ğəna m./f.s., child, pl. 'äğännit, d. ğənetät/ğənetay, d.p. ğənetam/ 'äǧännitam.

$C\ddot{a}CV(t)$

zäma m.s., brother-in-law, zämatat.

zäga m.s., village, pl. zägatat. läga m.s., young bull, pl. 'äläggit,

d. lägetay, d.p. lägetam. hägo m.s., belt of beads, pl. hägwat häwäggi, d. hägotay.

țälit f.s., she-goat, pl. 'ațal, d. țalität, d.p. 'ațelat.

CiCV(t)

țišo f.s., pot, pl. țäwäšši, d. țišotät. qišot f.s., country village, pl. qäwäšši, d. qišotät.

higa m./f.s., speech, pl. hägäggi, d. higätit/(p.?) higetay.

CeCV(t)

qeto, f.s., arm-chair, pl. qäwätti, d. qetotät.

'edo m.s., skin cushion, pl. 'äwäddi. 'ela f.s., well, pl. 'äwälli, d. 'elätit. 'eşat f.s., back, pl. 'äwäşşi.

CoCV

korit f.s., ball, pl. käwärri, d. korität.

dosä m.s., hut, pl. däwässi, d. dosetay, d.p. dosetam.

konat f.s., spear, pl. käwänni, d. konätit, p. konetay.

mora m./f.s., stick (f. 'a nice . . .'), pl. märäwwi, d. morätit/(p.?) moretay.

rora m.s., highland, pl. räwärri, d. roretay.

CaCV

'aya m.s., big hawk, pl. 'ayatat, d. 'ayetay, d.p. 'ayetam.

$C_{\partial}C_{\partial}C$

fətəh m.s., justice, pl. 'äftəhat. fədəg/fətəq f.s., small creek, pl. 'äfdug/'äfṭuq.

fərəm m.s., charcoal kiln, pl. 'äfram/ 'äfərmät.

fələq m.s., pole supporting roof, pl. 'äfluq, d. fəlleqay/fəlqay.

bagal m.s., shoot (of seed), pl. *'äbgal* (plants).

bə'əs m.s., husband, pl. 'äb'əs. bərək f.s., knee, pl. 'äbrak. bərə' m.s., pen, pl. 'äbrə'at. dərəş m.s., belly, pl. 'ädruş. səmət m.s., side, pl. 'äsmat. səʻəd m.s., strong arm, 'äsʻud.

sələf f.s., husband's brother's wife, pl. 'äslaf.

sələk m.s., wire, pl. 'äslak. səməd m.s., door-post, pair of oxen,

pl. 'äşmad. şəfər m.s., finger-nail, pl. 'äşfar.

šəbəh c., fat, s. šəbhät. šəfər c., manure, s. šəfrät.

šəkəm m.s., hoof, pl. 'äškum.

šəqəl m.s., work, 'äšqal.

šəhər/šəhərtay m.s., evil magician, pl. šəhär.

šərəm m.s., rain-water pond, pl. 'äšramat.

CaCaC-(cont.)

ğənəs m.s., kind, pl. 'äğnas. čəhəm m.s., jaw, pl. 'äčham/'äčhum. kərən f.s., voice, pl. 'äkran/'äkrun. d. kərrenät, d.p. 'äkrenat. kətəm f.s., stamp, seal, pl. 'äktam. gədəb m.s., wood-axe, pl. 'ägdub. gəmə' m.s., huge boulder, pl. 'ägämmə'ət/'ägəmmə'ät. gələb f.s., cliff, pl. 'äglab. qətəb m.s., leg of bed, pl. 'äqtub. qəšən m.s., branch, pl. 'äqšun, d. qəššenay. qəmə' m.s., filter, pl. 'äqmə'at, d. gəmme'ay. qərəd m.s., root, pl. 'äqrud. mətəd m.s., stake, pl. 'ämtud. mədər m.s., land, pl. 'ämdar/ 'ämdarat. mə'əl (or 'äm'əl) f.s., day, pl. 'äm-'əlotat, d.p. 'äm'elat. mələč f.s., herd of goats, pl. 'ämlač. nəhəb f.c., bees, pl. 'änhab, s. nəhbät, d. nəhbätit, d.p. nəhbetat/ 'änhebat. nahas m.s., house, pl. 'anhas, d. nəhesay, d.p. 'änhesam. 'əbən f.c., stone, pl. 'əbän, s. 'əbbänät, d. 'əbbänätit, d.p. 'əbbänat. *'əzən* f.s., ear, pl. *'əzän*. 'azan f.s., section of tribe, pl. 'azan. 'əkəl c., corn, pl. 'akal, s. 'əklät. 'əgər f.s., foot, pl. 'əgär. həməs m.s., bottom of belly, pl. hamas. həfən f.s., double handful, pl. hafan, d. həffenät. həbət f.s., armpit, pl. habat. həbər m.s., colour, pl. habar. həzəb m.s., people, pl. hazab, d. hazzebay. həqəf f.s., bosom, pl. haqaf. hələm m.s., dream, pl. halam. hələğ m.s., anklet, pl. halağ, d. həlleğay.

'ədər m.s., sickness, pl. 'adar.
'ətəb c., cotton, pl. 'atab, s. 'ətbät,
d.p. 'ətbat.
'əsər m.s., gum (of teeth), pl. 'asar.
'əqəb m.s., leg, pl. 'aqab.
'əmər m.s., life, pl. 'amar.
'ələb m.s., number, pl. 'alab.
'ələğ m.s., child, 'kid', pl. 'aluğ.
rəhəm m.s., belly, pl. 'ärḥam.
ləqəb m.s., small cave, pl. 'älqub.
ləhəş c., bark for making rope, s.
ləḥṣät.
wəhər m.s., bull, pl. 'äwhərät, d.p.
'äwhəretam.

C∂CCät

kərdät, kind of tree, pl. 'äkrud.

CaCCay1

bə'ray, ox, pl. 'äb'ərät, d. bə'retay, 'äb'əretam.
 bəllay, cloth, pl. bälällit, d. bəlletay.

C∂CäC

fəhäm c., charcoal, s. fähmät, d. fähmätit, p. fähmetay, a. fähmay. fəräw c., fleece, s. färwät. bəqäš c., luggage, s. bäqšät. bəhär f.s., pl. 'äbhər, d. bährätit. bəläq c., big rocks, s. bälqät. təkäk c., bracelets, s. təkkät. dəbäb c., tilth, s. däbbät. dəbä' c., forest, s. däb'ät, däb'ätit. dəmäq c., skulls, s. dämqät. dəmän c., abandoned buildings, s. dəmnät. dəläl c., umbrellas, s. dällät. dəhäb c., gold, pl. 'ädhub, s. dähbät, d. dähbätit. səfär c., tables, pl. säfrotat, s. säfrät, d. säfrätit. səkäk, train lines, s. səkkät. sənä' c., science, s. sän'ät. sərär c., sparks, s. särrät.

¹ For others with the ending -ay see under CoCCaC. Only those in which -ay must be regarded as the suffix are given here.

CaCaC-(cont.)

sə'är c., grass, pl. 'äs'ər, s. sä'rät, d. sä'rätit, p.p. sə'äretam.

zəbäd c., butter, s. zəbdät.

šəfäf c., blankets, s. šäffät.

šəmäm c., black woollen blankets, s. šəmmät.

šənäţ c., haversacks, s. šänţät.

šəläg c., handfuls, s. šälgät.

ğəräd c., straight daggers, s. ğärdät. çəgär c., hair, pl. 'ä çgur, s. çəggärät, d. cəggärätit.

čəqäm c., fistfuls, s. čəqmät, d.

čəqmätit.

gəhär c., charcoal, s. gährät, d. gährätit.

gənäb c., pads put under saddle, s. gämbät.

gəräh c., fields, s. gärhät, d. gärhätit, p. gärhetay, a. gärhay, d.p. gärhat.

kətäf c., muscle, s. kətfät, d. kətfätit.

kəräš c., stomachs, s. käršät, d. käršätit.

kəyäm c., tents, s. käymät, d. kaymätit.

kəwäk c. (f.p.), black snakes, s. kukät (kəwkät), d. kukätit.

qədäd c., growth on body, s. qəddät. qətäb c., thorn trees, s. qətbät.

qəmäl c., lice, s. qəmmälät, d. qəmmälätit, a. qəmällay.

qəläw c., coloured matting, s. qəlwät.

qəwä' m.s., crane, pl. 'äqəw'ät.

mədäd c., grindstones, s. məddät. mə'äs m.s., hide, pl. 'äm'əs, d. mə-

'äsetay, d.p. mə'äsetam/'äm'esam. məhäg m.s., hot fire, pl. 'ämhəg.

nəḥär m.s., chest, pl. 'änḥur/'änḥar. nə'äl(t) f.s., sister-in-law of woman, pl. nə'ältotat.

'ətäm c., springs, s. 'ətmät, d. 'ətmätit.

'abär c., needles, pl. 'äbärri, s. 'abrät.

həbäz c., bread, s. həbbäzät.

həgär c., red ointment of clay, s.həgrät, d. həgrätit.

ḥəräb c., jute curtains, s. ḥərbät.

həräş f.s., stick, pole, pl. haruş, d. həreşät, d.d. həreşätit.

ḥəläq c., metal hair bands, s. ḥəlqät.

həwäy c., camel-saddles, s. häwyät. 'aĕäy c., wood, trees, s. 'aĕyät/, 'aĕyay (tree/piece of wood), d. 'aĕyätit.

'ayāb c., sacks, s. 'ibāt ('aybāt), pl. 'ayab.

'əyär c., insults, s. 'irät ('əyrät).

rəkäb c., water-bottles, s. rəkbät, d. rəkbätit.

rəšām c., mountain tops, s. rəšmät. rəqäy c., curved sticks, s. rəqyät. rə'äs m.s., head, pl. 'är'əs, d. rə-'äsetay.

Ca Cä Cät

məḥäṭät, railway station, pl. məḥäṭotat. ləhäbät, sweat, pl. ləhäbotat.

C₂C_aC

fəraš f.s., mattress, pl. 'äfəršät.
bə'al m.s., festival, pl. bə'alat.
təkan c., red bugs, s. təkenay.
təkay m.s., pole of house, pl. takyat.
dərar m.s., supper, pl. 'ädərrät, d.
dəreray.

səfal m.s., pipe for carrying flour in mill, pl. 'äsəflät.

səgad (or səgad) m.s., neck, pl. 'äsəgdät.

sərak m.s., sandal strap, pl. 'äsərkät. səray m.s., medicine, pl. 'äsəryät. səlam m.s., bullock's hump, pl. 'äsəlmät.

zəfan m.s., throne, pl. zəfanat. zəlam f.s., rain, pl. zälayəm. şəlal f.s., shadow, image, pl. 'äşəllät. şəwar m.s., arms, pl. 'äşəwrät. šəqaq m.s., lavatory, pl. 'äsəqqät. CaCaC-(cont.)

ğəban c., coffee-pots, pl. ğäbänotat, s. ğäbänät, d. ğäbänätit, p. ğäbänetay, d.p. ğäbänetat.

ğəlab c., dhows, s. ğälbät, d. ğälbätit.

kətab m.s., book, pl. 'äkətbät, d. kətebay.

kərar m.s., window curtain, pl. 'äkərrät.

kəlal m.s., wooden hair comb, pl. 'äkəllät.

gərab m.s., thing, pl. 'ägərbät, d. gərebay.

gəran m.s., bracelet, pl. 'ägərnät, d. gərenay.

qərab c., skin, s. qärbät, d. qärbätit.

məhaz m.s., river bed, pl. məhazat, d. məhezay/məhazetay.

nəway m.s., herd of cattle, pl. 'änəwyät.

'əsat f.s., fire, pl. 'əsatat, d. 'əsetät, d.d. 'əsetätit.

'əgal m./f.s., calf, pl. 'əgəl, d. 'əgelät/
'əgelay, d.p. 'əgelat/'əgelam.

'enas m.s., man, pl. säb, d. 'enesay' 'enasetay, p. 'enesät, d.p. säbetam, p.p. säbetat.

'əwan f.s., time, d. 'əwenät, d.d. 'əwenätit.

həşan m.s., boy, d. həşenay.

həlay c., poems, s. həlayät, d. həleyät/həlayätit.

həwar m./f.s., small foal, pl. häwrät, d. həwerät/həweray, d.p. həwerat/ həweram.

'ədal c., celebrations, s. 'ädlät.

'əday c., debts, s. 'äydät.

'əzal m.s., shade, pl. *'äzəllät*.

rəsas m.s., pencil, pl. 'ärəssät, d. rəsesay.

rəkab m.s., stirrup, pl. 'ärəkbät, d. rəkebay.

rəyal m.s., dollar, pl. 'ärəylat.

ləban c., incense, s. ləbanät/ləbenät, d. ləbenätit.

wəraq c., paper, pl. wäräqotat, s. wäräqät, d. wäräqätit, d.p. wäräqetat.

C₂CaCät

təyarät, aeroplane, pl. təyarat. səgadät, ascent, pl. sägayəd. šəgarät, cigarette, pl. šägayər, d. šəgarätit, p. šəgaretay, d.p. šəgaretat. gənazät, corpse, pl. gänayəz.

C₂CiC

fəlit f.s., calf, pl. fälayət, t. d. fəlität, d.d. fəlitätit, d.p. fəletat.
təwit f.s., cartridge, pl. täwawit, d. təwität, d.p. təwitat.
šə'ir c., barley, pl. šə'ayər, s. šə'irät, d. šə'irätit.
həlil m.s., dry river bed, pl. hälayəl.
wəhiz m.s., stream, pl. wəhayəz, d. wəhizay.

C₂C_eC

bə'er, m.s., half-grown camel, d.
bə'eray, d.p. bə'eram.
fədel m.s., letter, d. fədelay.
sətet f.s., rib, pl. säytat.
ğənen f.s., garden, pl. ğänayən/
ğənenotat, d. ğənenät, d.d. ğənenätit.
gəret m.s., Muslim woman's silver
ornament, pl. gärayət.
qəren m.s., state, government, pl.
gərenat.

$C_{\partial}C_{u}C$

fəluy m.s., calf, pl. fälayit, d. fəluyay, d.p. fəluyam.
qəruš m.s., money, pl. 'äqruš.
nəgus m.s., emperor, pl. näggäs.
hədud m.s., boundary, pl. hädayəd.
'əquq m.s., flat field in valley, pl.
'äqayəq.

The feminine of foluy, q.v.

CaCoC

bəsot f.s., forehead, pl. bäswat.

qəror m.s., glass, pl. qärawər, d. qərorät.

nagot f.s., elephant's trunk, pl. nägwat.

'agot f.s., small earthenware cup, pl. 'ägwat.

'aqot f.s., rope for tying animals, pl.
'äqwat.

'ayot m.f.s., lamb, pl. 'ayut/'äywat/
'äwyat, d.p. 'ayutam.

CäaCC

fätəl m.s., thread, pl. 'äfättəl.

färad m.s., revolver, pl. 'äfrud, d. färreday.

fäləş c., wood, s. fəllaşay, d. fəlleşay/ fəllasetay.

bāṣəh m.s., young man, pl. 'ābaṣhət. tādə' m.s., centre of breast-bone, pl. 'ātāddə'ət|'ātəddə'āt, s. ('piece of . . .') tād'etay.

tärəf m.s., child, son, pl. 'ätraf.
däbər m.s., mountain, pl. 'ädbər, d.
däbberay.

täbəl m.s., drum, pl. 'ätbəl.

säfð m.s., winnowing tray, pl.
'äsäffð ðt/äsəffð ät, d. säf etay, d.p.
säf etam.

säyəf m.s., sword, pl. 'äsäyəf, d. säyefay.

zärə' m.s., seed, pl. 'äzärrə'ət.

şäbəḥ m.s., lunch, pl. 'äṣäbbəḥət/
'äṣəbbəhät.

şäfər m.s., hide rope for loading donkey, pl. 'äsfər.

şärə' m.s., teat, pl. 'äṣärrə'ət/'äṣərrə'ät.

şälə' c., infected wounds, pl.
'äṣällə'ət|'äṣəllə'ät, s. ṣäl'ät.

čáfo' c., dung, pl. 'äcäffo'ət, s. čáf'ät, d. čáf'ätit, p. čáf'etay, d.p. čáf'at.

šära' m.s., diarrhoea, pl. 'äšärra'at. šära' m.s., stones for retaining soil, pl. 'äšärra'at. käbəd f.s., belly, pl. 'äkbud/'äkbəd, d. käbbedät.

käləb m.s., dog, f. kälbät, pl. 'äklub, d. kälbätit/källebay, d.p. 'äklebat/ 'äklebam.

käyəs m.s., python, pl. 'äkäyəs, d. käyesay,/käysetay.

gäbər m.s., male slave, pl. 'ägbər, d.p. 'ägberam.

qäbər m.s., tomb, pl. 'äqbər, d. qäbberay.

qädər c., small flying insects, s. qädray.

qädəḥ m.s., pot for dipping water, pl. 'äqäddəhət.

qäləb m.s., wish, pl. 'äqlub.

qäyəd m.s., hobbling rope, pl. 'äqäyəd.

qäyə' m.s., vomit, pl. 'äqəy'ät. näfəs f.s., soul, pl. 'änfas.

märəg c., earthenware, s. märgät.

'ädəg m.s., donkey, f. 'ädgət, pl. 'ädug, d. 'ädgətit|'äddegay, d.p. 'äddegat|'äddegam.

'äləf m.s., thousand, pl. 'alaf.

häbəl m.s., rope, pl. habal. härəb m.s., water skin, pl. härrəbət,

d. härrebay.

härə' m.s., dung, pl. härrə'ət.
'äwəl m.s., cost, pl. 'awal, d.
'äwelav.

wädə' c. shells, pl. 'äwäddə', s. wäd'ät.

wäkəd f.s., time, pl. 'äwkad, d. wäkkedät.

wäraq c., silver, pl. 'äwärraq, s. wärqät, p. wärreqay.

wärəh m.s., moon, month, pl. 'äwärrəhət.

CäCCät

täblät, lock, pl. täblotat.

täwlät, table, pl. täwlotat/täwälli, d. täwlätit, p. täwletay.

šänkät, side, pl. 'äšnuk.

gäbhät, forehead, pl. gäbhotat.

'ägnät, nomad's hut, pl. 'ägnotat.
'ärsät, termite, d. 'ärsätit, a. 'ärsay.

CäCCät—(cont.)

lähmät, skin on boiled milk, pl. lähavəm/lähmotat.

CäCCay

tästay, bull, pl. tästot, d. tästeyay, d.p. tästeyam.

märday, point, pl. märäddit, d. märdetay.

härmay, robber, pl. härmäč/härmät.

CäCäC

färäs m./f.s., horse, pl. 'äfräs/'äfrus, d. färresät/färresay, d.p. 'äfresat/ 'äfresam.

färä' m.s., branch of family, pl. 'äfärrə'ət, d. fär'etay, d.p. fär-'etam.

bädän m.s., animal corpse, pl. 'äbäddən.

bäsäl c., onions, s. bäslät.

bäräd m.s., hail, pl. 'äbärrad.

bäläs c., prickly pears, s. bälsät, d. bälsätit.

tämär c., dates, s. tämrät.

säbäb c., reasons, pl. 'äsäbbəb, s. säbbät.

sädäf m.s., button, pl. 'äsdaf.

benam.

sägän f.s., ostrich, pl. 'äsgan/'äsgun. zäbän m.s., century, pl. 'äzbən/ 'äzbun, d. zäbbenäy, d.p. zäb-

zänäb m.s., tail, pl. 'äzännəb, d. zännebay.

şägäm m.s., struggle, pl. 'äşgum. šämär m.s., penis, pl. 'äšmur.

šäkäm m.s., beard, pl. 'äšäkkəm/

'äškum, d. šäkkemay. ğäfär m.s., side, pl. 'äğfur/'ağfər.

ğäbäl m.s., dewlap, pl. 'äğbal, d. ğäbbelay.

čäbäl c., ashes, d.p. čäblat.

käbär m.s., news, pl. 'äkbar.

kärän m.s., mountain, pl. 'äkran, d. kärrenay, d.p. kärrenam.

gäbäy f.s., road, pl. 'ägbuy, d. gäbbeyät.

gädär m.s., accident, pl. 'ägäddər. gämäl m.s., male camel, pl. 'ägmal, d. gämmelay, d.p. gämmelam. gäläb f.s., spear, pl. 'äglub/'ägälləb,

d. gällebät.

qäţäf c., leaves, pl. 'äqäţţəf, s. qätfät, d. qätfätit, d.p. qätfat. qäčäč m.s., sweepings, pl. äqäččač.

qäräf c., bark, s. qärfät.

qäräş c., kind of tree, s. qärşät/ qärşay (tree/wood).

mäbäl f.s., widow, pl. mäbälli.

mädäf m.s., young ram, pl. 'ämäddəf, d. mäddefay.

mäsäl m.s., image, pl. 'ämsal.

näkäk m.s., molar, pl. 'änkuk.

'ämät f.s., female slave. pl. 'amut.

'äsär m.s., track, pl. 'asur/'asar, d. 'ässeray.

häbäy m./f.s., monkey, pl. häbuy, d. häbbeyät/häbbeyay, d.p. häbbeyat/häbbeyam.

hämağ m.s., serf, pl. hamağ, d. hämmeğay.

häwät m.s., water skin, pl. hawut, d. häwetay.

hägän m.s., bone-marrow, pl. hagun.

hägäl f.s., guinea-fowl, pl. hagul. hämär m.s., gold ornament, pl. hamur.

häyät m.s., lion, pl. hayut, d. häyetay, d.p. hayutam.

'ädäd m.s., limit, pl. *'adud*.

'äğäm c., ivory, s. 'äğğemät.

'äräd m.s., neck, pl. 'arud, d. 'ärreday.

'äräm m.s., untreated skin, pl.

rämäč c., embers, d.p. rämčat.

läšäm c., kind of bush, s. läšmät. wädäg m.s., small dry riverbed, pl.

'äwäddəg, d. wäddegay.

wätär m.s., heroic song, pl. 'äwättər, d. wätteray.

wänän m.s., wild animal, pl. 'äwännən.

CäCäCät

mäsärät, foundation, pl. mäsärotat.

CäCaC

tänan m.s., smoke, pl. 'ätənnät, d. tänenay.

tälal m.s., ear-ring, pl. 'ätəllät. käray m.s., hyena, pl. käräč! 'äkärrit, d. käreyay, d.p. 'äkärritam.

qärad m.s., horsefly, pl. qäradotat. mäsar f.s., axe, pl. mäsarat, d. mäserät.

mägab m.s., inside of thigh, pl. mägabat.

märat f.s., pond, pl. märatat.
'äkan m.s., place, pl. 'äkanat, d.
'äkenät.

'ärab m.s., antelope, pl. 'ärabat, d. 'ärebay, d.p. 'ärebam.
'äday c., kind of bush, s. 'ädeyät. 'ärat f.s., bed, pl. 'äratat, d. 'äretät. häram f.s., sin, d. häremät. värat m.s., job, pl. wäratat.

CäCiC

näwid m.s., kid, pl. näwayəd, f. näwidät, d. näwiday/näwidätit, d.p. näwedam/näwedat.

šäriţ m.s., string, pl. šärayəţ, d. šäriṭay.

šäbiq m.s., beestings, pl. šäbayəq. gäbil c., tribes, pl. gäbayəl/gäbilotat, s. gäbilät, d. gäbilätit.

gäšiš m.s., maize cake, pl. gäšayəš. qämiš m.s., shirt, pl. qämayəš. häşin m.s., iron, pl. häşayən, d.

hāṣin m.s., iron, pl. hāṣayən, d. hāṣinay, d.p. hāṣinetam (hāsināt quality of iron).

häšil m.s., jackal, pl. häšayəl, d. häšilay, d.p. häšilam/häšiletam. hälib m.s. (?), milk, pl. hälayəb. härič m.s., flour, pl. härayəč, d.p. häričat.

härim m.s., man of leisure, pl. härayəm.

'äğin m.s., dough, pl. 'äğayən, d. 'äğinay.

yätim m./f.s., orphan, pl. yätayəm, d. yätimay / yätimetay / yätimät, d.p. yätimetam/yätimetat.

CäCiCät

däkilät, request, pl. däkayəl. gäzirät, island, pl. gäzayər, d. gäzirätit, d.p. gäzerat, p.p. gäzeram. 'äšinät, bag, pl. 'äšayən.

$C\ddot{a}CeC$

šäwet m./f.s., ear of corn, pl. šäwyat, d. šäwetay/šäwetät, d.p. šäwetam/šäwetat. käleb m.s., fold, pl. kälayəb.

CäCeCät/ay

särerät/säreray, bird, pl. säräyər, d. säreretay/särerätit, d.p. säreretam/säreretat.

$C\ddot{a}CuC$

sämuy m.s., trough, pl. sämayit, d. sämuyay/sämuyetay.

särur c., dirges, s. särurät.

hädud m.s., thunder, pl. hädayəd, d. häduday.

häşur m.s., hedge, zariba, pl. häşayər (häşurät, branch for making zariba).

häbuš c., solitary locusts, s. häbušät. 'ämur f.s., milk-pail, pl. 'ämayər, d. 'ämurät.

$C\ddot{a}CoC$

'äbot f.s. grandmother, pl. 'äbotat.

CäCoCät/ay

täkobät, grass mat, pl. täkayəb, d. täkobätit, d.p. täkobetat. häromay, bell, d. härometay.

$CaC_{\partial}C$

farəs m.s., horseman, pl. farsotat.

CaCeC—(cont.)

samən f.s., week, pl. samnotat, d. samnätit/saməntätit, d.p. saməntetat.

sahəl m.s., shore, pl. sahlotat. zabət m.s., officer, pl. zəbbat. katəm f.s., ring, pl. katmotat, d.

katəm i.s., ring, pi. katmotat, katmätit, d.p. katmetat.

kafər m.s., infidel, pl. kafrotat. gadəm m.s., plain, pl. gadmotat, d. gadmetay.

qaçəl m.s., little bell, pl. qaçlotat, d. qaçletay.

hatər m.s., hero, pl. hatrotat, d. hatretay, d.p. hatretam.

CaCCät

faytät, prostitute, pl. fätayib.

CaCoC

badob c., desert, s. badobät. qalot m.s., echo, pl. qalotat.

CaCuC

fanus f.s., lamp, pl. fäwanis, d. fanusät, d.d. fanusätit.
babur m.s., train, steamship, pl. bäwabir, d. baburay.
dagus c., millet, s. dagusät.
čačut m.s., chick, pl. čäčawit, d.
čačutay, d.p. čačutam.
sabun c., soap, s. sabunät.

CiCVC

birob m.s., grass sack, pl. bäwarəb. tikas m.s., nomadic hut, pl. täkayəs.

CeCVC

šetan m.s., devil, pl. šäwattən, d. šetənnay, d.pl. šetənnetam.

mezan f.s., scales, pl. mäwäzzən/
mezanat.

hesas c. (?), rancid butter, pl. häwässəs, d.p. hesəssat.

CoCaC (ät/Cät)

kofyät, Muslim hat, pl. kofyotat. qobs' m.s., hat, pl. qäwabs'.
moţs' m.s., sling, pl. mäwätts'.
moqsh m.s., fetter, pl. mäwäqqsh.
horəmmät, pass, pl. häwärrəm.

CoCäC

foqäy m.s., inside of shoulder, pl. fäwäqqi. gohär m.s., diamond, pl. gäwahər.

kokäb m.s., star, pl. käwakəb. kokän m.s., hollow rock with water in it, pl. käwakən.

šokän f.s., antelope, pl. šäwäkkən, d. šokənnät.

mokäs m.s., ladle, pl. mäwäkkəs. hoğäb m.s., eyebrow, pl. häwağğəb. 'obäl c., kind of tree, s. 'obəllät.

CoCaC

soțal m.s., curved dagger, pl. säwäţtəl, d. sotəllay.

molad m.s., relative, pl. mäwällad.
rošan f.s., storied building, pl.
räwašin/räwäššən, d. rošannätit, p.
rošannay, d.p. rošannetat, p.p.
rošannetam.

roman c., pomegranates, s., romanät.

C ightarrow C C a(t)

təkla m./f.s., wolf, pl. täkällit, d. təkletay/təkletät, d.p. tekletam/təkletam.

təgrat f.s., waterpail, pl. tägärri, d. təgretät, d.p. təgretat.

dəbba m.d., marrow, pumpkin, pl. däbäbbi.

dəkka m.s., stool, pl. däkäkki, d. dəkketay.

səlqa m.s., beer, pl. säläqqi. šəkna f.s., hoof, pl. säkani.

qəsla c., kind of tree, s. qəslät (or kəsra, kəsrät).

məgda m.s., bonfire, pl. mägäddit, d. məgdetay, d.p. məgdetam. həbsat f.s., leather bag, pl. häbässi.

C ightarrow C C i(t)

sə'li f.s., picture, pl. sə'litat, d. sə'lität.

čəb'it f.s., finger, pl. 'äčabə', d. čəb'ität.

təmbi f.s., ball, pl. tänäbbit, d. təmbität.

qəlfi m.s., button, pl. qäläffit.

məsli m.s., image, pl. məslitat, d. məslitay.

həndi m.s., hoof, pl. hänäddi.

CaCCe(t)

dəgge m.s., town, pl. dägäggit, d. dəggetay, d.p. dəggetam.

sərre m.s., trousers, pl. särärrit, d. sərretav.

gərre m.s., lizard, pl. gärärrit, d. gərretay, d.p. gərretam.

qəmbet f.s., backyard, pl. qänäbbi. 'ətye f.s., noble lady, pl. 'ətyetat.

C₂CCu

dəmmu m./f.s., cat, pl. dämämmit, d. dəmmutay/dəmmätit, d.p. dəmmetam/dəmmetat/dəmmutam/dəmmutat.

šəllu m.s., squirrel, pl. šälällit, d. šəllutay, d.p. šəllutam.

CaCCo

səqlo m.s., hut, pl. säqällit, d. səqlotay, d.p. səqlotam.

gənto f.s., young female baboon, pl. gänättit.

'ətro f.s., water jug, pl. 'ätärri, d. 'ətrotät, d.p. 'ətrotat.

CäCCa

bäfta f.s., strip of white cotton, pl. bäfättit, d. bäftätit.

bälga c., side shoots of sorghum, s. bälgät.

däbna/dämna c., rain clouds, pl. däbnatat/dämnatat, s. däbnetay.

šägla c., fig trees, pl. šägali, s. šäglät, d. šäglätit.

gärwa m.s., male antelope, pl. gäräwit, d. gärwetay.

qäḥwa m.s., coffee, pl. qäḥawi (cf. bun).

mämba m.s., master, pl. mänabit, d. (p. ?) mämbetay.

mänka f.s., spoon, pl. mänäkkit, d. mänkätit, p. mänketay.

näbra m.s., food, pl. näbärrit, d. näbrätit.

'ätba c., kind of tree, s. 'ätbetät.
'ärga m.s., tooth-mark, pl. 'äräggit.
'älma m.s., crocodile, shark, pl.

'älämmit.

'äqba c., kind of tree, s. 'äqbetät.
'änqa c., kind of tree, s. 'änqetät.
hälqa c., kind of tree, s., hälqetät.
hämda m.s., dew, pl. hämäddit.

hämda m.s., dew, pl. hämäddit. wädna m.s., threshing place, pl. wädännit.

wä'ga m.s., monkey, pl. wä'gatat.

CäCCi

mäsni m.s., friend, pl. mäsanit, d. (p.?) mäsnitay.

mäw'i m.s., lamentation, pl. mäw'itat.

räbbi m.s., God, god, pl. räbbitat.

$C\ddot{a}CCe(t)$

šärbe m.s., soup, pl. šäräbbit. kädbet f.s., floor, pl. kädäbbi. hämle c., vegetables, s. hämletät. 'ärwe m.s., serpent, pl. 'ärawit, d. 'ärwetav.

wägre c., olives, pl. wägari, s. wägretät/wägretay (tree/wood).

$C\ddot{a}CCo(t)$

fändot f.s., buttock, pl. fänadi. bäqlot f.s., thigh, pl. bäqari. därno/dänro m.s., bottom of spine, pl. däränrit.

$C\ddot{a}CCo(t)$ —(cont.)

dä'ro c., sycamores, pl. də'ari, s. dä'rotät, d. dä'rotätit.

särgo m.s., trinket, pl. säräggit, d. särgotay.

qärso m.s., ankle bone, pl. qärässi. 'äblo m.s., hut, pl. 'äbällit.

häbko c., gum, s. häbkotät, d.p. häbkotat.

hänno m.s., wife's sister's husband, pl. hännotat.

CaCCV

tavta c., bread, s. tavtätit.

katra f.s., pigeon, pl. kätärri/ katratat, d. katrätit, d.p. katretat. gašša c., guests, s. gaššay.

rawya m.s., stork, pl. rawyatat, d. rawyetay, d.p. rawyetam.

wanča f.s., drinking-horn, pl. wänäččit, d. wančätit.

walta f.s., shield, pl. wälättit, d. waltätit.

qanči c., straw, pl. qančitat, d. qančität.

CeCCV

derho m./f.s., fowl, pl. däräwəh, d. derhotay/derhotät, d.p. derhotam/ derhotat.

'etro f.s., dikdik, pl. 'ätärri, d. 'etrotät, d.p. 'etrotat.

CoCCV

soldi m.s., money, pl. säladi, d. solditay, d.p. solditam.

mokla m.s., youth come of age, pl. mäkällit.

$C_{\partial}CC_{\partial}C$

dəgdəg c., land higher than other, pl. dägäddəg, s. dəgdəggät.

dəngəl f.s., virgin, pl. dänagəl/dänäggəl.

dərfən m.s., young ram, pl. däräffən, d. dərfənnay (a fine lad), p. dərfenay. dərsəs c., sandstone, pl. därässəs, s. dərsəsät.

dəldəl m.s., bridge, pl. däläddəl.

šənrəb f.s., bruise, pl. šäränrəb, d. šənrəbätit.

gənşəl m.s., shot-gun, pl. gänäşşəl, d. gənşelay.

qənqən c., weevil, pl. qänäqqən, s. qənqənnay, d. qənqenay.

qalčam f.s., wrist, pl. qäläččam, d. qalčamätit, p. qalčamay, a. qalčammay (or s., 'piece of . . .').

məsgəd m.s., mosque, pl. mäsagəd, d. mäsgeday (mäsgedät = area for praving).

məšdəg/məšṭəq f.s., cheek, pl. mäšadəg/mäšatəq.

mənkəb m.s., shoulder, pl. mänakəb, d. mänkebay.

məhbə' f.s., hiding place, pl. məhabə', d. məhbə' ätit, p. məhbə' etay.

mə'tən m.s., water hole, pl. mə'atən, d. mə'tenay.

ma'kən m.s., store, pl. mə'akən. məltəh m.s., temple (of head), pl. mälatəh.

'ənğəh c., quartz, s. 'ənğəhät, d. 'ənğəhätit.

'ənkər m.s., direction, pl. 'änäkkər. həntəl f.s., appendage, pl. hänättəl. həlqəm m.s., throat, pl. häläqqəm.

'andar f.s., bamboo flute, pl. 'änäddar, d. 'andarätit.

'ənkər m.s., puppy, kitten, cub, pl. 'änäkkər, d. 'ənkərray, p. 'ənkeray, d.p. 'ənkeram.

CaCCaC(C)ät

tənkəllät, plait, pl. tänäkkəl, d. tənkəllätit, p. tənkəlletay. təffə'ät, saliva, pl. täfäffə'.

dəbbəyät, ambush, pl. däbäbbi/ dəbbəyotat.

šənrəhät, dried meat, pl. šäränrəh. gərgəmmät, wind-pipe, pl. gäräggəm. 'ətfəyät, hearth-stone, pl. 'ätafə'. 'ənkəllät, hill, pl. 'änäkkəl, d. 'ənkəllätit, p. 'ənkəllay.

C∂CCäC(ät)

tənhäg f.s., palate, pl. tänhəg. dəmmäl f.s., vengeance, pl. dämämməl.

dəgläl m.s., tribal chief, pl. dägälləl. čərnä' m.s., vampire, pl. čäränrə'. qərqäb m.s., clog, pl. qäräqqəb.

madmä' f.s., stroke, pl. mädama', d. mädmə'ätit.

həmmäm m.s., leopard, pl. hämämmit, d. həmmemay/həmmämmay. həmmärät, baobab, pl. həmmärotat.

CaC(at)

fəğğan m.s., coffee cup, pl. fäğağin. bəstan m.s., garden, pl. bäsatin, d. bəstenay.

bərmay m.s., grass tick, pl. 'äbərmät/bärämmit.

təmbak c., tobacco, s. təmbakät, d. təmbakätit.

zənnabät, headscarf, pl. zänännəb.

šəftay m.s., brigand, pl. *šäfättit*.

d. šəbbakätit. šənkar m.s., nail, pl. šänäkkər, d.

šənkeray.

šərnay/šənray c., wheat, pl. šäränri/ šäränrit, s. šərneyät, d. šərneyätit.

šərraf m.s., piece, pl. šärärrəf. čənčay m.s., fly, pl. čanaččit, d.

čənčeyay, d.p. čənčeyam. čərram f.s., bandage, pl. čärärrəm,

d. cərremät.

kəbbayät, earthenware vessel, pl. käbabi.

kəssar c., food, s. kəsserät.

kərbağ f.s., whip, pl. käräbbəğ, d. kərbeğät.

kərtaf m.s., card, pl. kärättəf, d. kərtefay.

kərmad m.s., tree stump, pl. kärämməd.

kərran m.s., group of animals separated in hunting, pl. kärär-

gənday m.s., dry wood, pl. gänäddit.

gəlbab m.s., veil, pl. gäläbbəb. məfraq f.s., hole, pl. mäfarəq. məfgar f.s., exit, pl. mäfagər.

mətraq f.s., hole, pl. mätarəq, d. mətregät.

məsbar f.s., broken limb, pl. mäsa-

məstar f.s., crack, p. mäsatər.

məsmar m.s., nail, pl. mäsamər, s. məsmerav.

məskab f.s., sleeping-place, mäsakəb, d. məskebät.

məsqal f.s., hanger, pl. mäsäqəl, d. məsqelät.

məšfat f.s., seam, pl. mäšafət.

məštat f.s., tear (in cloth), pl. mäšaţət.

məkrar f.s., sleeping-place, pl. mäkarər.

y məkray f.s., place for putting something, pl. mäkari.

məkyad f.s., track, pl. mäkayəd, d. məkyedät.

mə'tay f.s., entrance, pl. mə'ati. šəbbak f.s., window, pl. šäbäbbək, x məhfan f.s., hot place, pl. məhafən.

> mahdar f.s., place to settle, pl. məhadər.

> * mahsab f.s., washing-place, məhasəb.

mahrad f.s., slaughter-house, pl. maharəd.

mə'rag f.s., way up, pl. mə'arəg.

mərqa' f.s., patch, pl. märaqə'.

mərraq f.s., saliva, pl. märärrəq. məwhaz f.s., ditch, pl. mäwahəz, d.

məwhezät. nəggarät, drum, pl. nägagir, d.

nəggarätit. nəssal m.s., tongue, pl. näsässəl, d.

nəsselay, p. nəsselät. nəşşaf m.s., carpet, pl. näşäşşəf, d.

nəşşefay. həggaf m.s., dry creek, pl. hägäggəf. hənšaš m.s., old grass mat, pl.

labbas m.s., cloth, pl. läbäbbas, d. (p. ?) ləbbesay.

ḥänäššəš.

ləddat m.s., door-frame, pl. 'äläddət.

C₂CCiC

məstir m.s., secret, pl. mäsättər, d.

kərbit c., matches, s. kərbität, p. kərbitay (a spent match).

'əssit f.s., woman, pl. 'änəs, d. 'əssität, p. 'əssitay, d.p. 'ənsetat, p.p. 'ənsetam.

hənziz m.s., cockchafer, pl. hänäzzəz.

CaCCuC

bəggu' m.s., sheep, pl. 'äbagə', f. bagga'at, d. bagga'utay/bagga'atit, d.p. 'äbag'etam/'äbag'etat.

dəbbur m.s., arable hill land, d. dəbburav.

šəngul m.s., young man, pl. šänäggəl. šəltut m.s., rag, pl. šälättət, d. šəltu-

kərku' m.s., wax in ears, d. kərkə-

kətkut m.s., young bird, pl. kätakut/ kätakit, d. kətkutay, d.p. kətku-

qərtut c., corn (maize and millet), s. qərtutät, d.p. qərtutam.

həškul m.s., small leather bag, pl. häšäkkəl.

hənğur m.s., hornet, pl. hänäğğər, d. hənğuray.

həlbub m.s., millipede, pl. *häläbbəb*. 'əffun c., maize, pl. 'äfäffən, s. 'əffunät, d.p. 'əffunat.

CaCCoC(ät)

dəbbokät, kind of bread, pl. däbäb-

dərbobät, ant-hill, pl. däräbbəb.

CäCC∂C(ät)

täb'ən c., crawling insects, s. täb-'enay, d. täb'enetay.

täbbəl f.s., grass milk-jar, pl. 'ätäb-

därhəm f.s., money, pl. därahəm, d.p. därhemat.

mäftəh m.s., key, pl. mäfatəh, d. mäftehetay, d.p. mäftehetam. mäbrəhät, lamp, pl. mäbarhət, d. mäbrəhätit, p. mäbrəhetay. mädbə' m.s., lid, pl. mädabə'. mädfə' m.s., cannon, mädafə'. mätbə' m.s., stamp, seal, pl. mätabə' (*mäţbə*'*ät* printing-press). mämhər m.s., teacher, pl. mämhərät. mämfə'ät, profit, pl. mänaf'ät. mändə'ät, place where nothing grows, pl. mändə'otat, d. mändə-ʻätit. 'äm'əl m.s., day, pl. 'äm'əlotat, d.p. 'äm'elat (cf. mə'əl). 'äb'əb m.s., grandfather, pl. 'äb'əbotat. 'äs'ən m.s., pair of shoes, pl. 'äs-'ənotat, s. 'äs'enät, d. 'äs'enätit. häshəş c., gravel, s. häshəsät, d. häshəsätit, d.p. häshəsat. 'älləş f.s., big hawk, pl. 'älälləş, d.

'älləşät, d.p. 'älləşetat.

CäCCäC

färfär c., kind of tree, s. färfärät, d.p. färfäretat.

tärkäz f.s., heel, pl. täräkkəz. dämbär m.s., feather, wing, pl.

dänäbbər, d. dämberay.

ğänğär m.s., chain, pl. ğänağər. kämfär f.s., lip, pl. känäffer, d. kämfärät/kämfärätit.

kärfäz m.s., part of plough, pl. käräffəz.

mäthän f.s., mill, pl. mäthen.

mäskäb m.s., dwelling-place, pl. mäsakəb, d. mäskebay.

mäshäl f.s., whetstone, pl. mäshəl, d. mäshelät.

mäswäd m.s., leather bag, pl. mäsawəd, d. mäsweday.

mäs'än m.s., loaded beast, pl. mäş'ən, d. mäş'enay, d.p. mäş-ʻənam.

mäswär m.s., handle, pl. mäsawar. mäšräb m.s., rain pipe, pl. mäšarəb.

CäCCäC—(cont.)

mäčhär m.s., pot for carrying fire, pl. mäčhər, d. mäčheray.

mäkfän m.s., shroud, pl. mäkafən, d. mäkfenay.

mäktäb m.s., office, pl. mäkatəb.

mägzäm m.s., yoke of plough, pl. mägazəm. d. mägzemay.

mäqdäb m.s., bone of spine, pl. mäqadəb.

mäqtän m.s., small of back, pl. mäqatən, d. mäqtenay.

mämfär m.s., wing, pl. mänafər, d. mämferay.

mämbär m.s., chair, pl. mänabər, d. mämberay.

mämfäs m.s., spirit, pl. mänafəs. mändäq m.s., wall, pl. mänadəq,

d.(p. ?) mändeqay (ruined wall). mähbär m.s., assembly place, pl. məhabər, d. mähberay.

mähdär m.s., living place, pl. məhadər, d. mähderay.

mähzäl m.s., sling for carrying child on back, pl. məhazəl, d. mähzelay.

mäḥgäz m.s., need, pl. məḥagəz, d. mäḥgezay.

mähtäm m.s., rubber stamp, pl. məhatəm, d. mähtemay.

mä'ṣād m.s., sickle, pl. mə'aṣəd, d. mä'ṣēday.

märbäb f.s., fishing net, pl. märabəb, d. märbebät.

märkäb f.s., ship, pl. märakəb, d. märkäbät.

märgäm m.s., curse, pl. märagəm. märwäd f.s., ring, pl. märäwəd, d. märwedät, p. märweday.

mälgäb f.s., stone side of grave, pl. mälagəb, d. mälgebät.

näggäl m.s., young goat, f. näggälat, pl. 'änäggəl, d. näggelay/ näggälätit, d.p. näggelam/näggäletam/näggelat/näggäletat.

hängäl m.s., brain, pl. hänäggəl, d. hängelay. härgäş m.s., crocodile, pl. häräggəs, d. härgesay, d.p. härgeşam.

'äskär c., soldiers, s. 'äskäri, d. 'äskäritav.

'ästär m.s., sky, pl. 'äsättər.

'äggär c., hunters, s. 'äggärtay.

'aqqač c., soldiers, s. 'aqqaytay.

'änqär f.s., palate, pl. 'änäkkər. 'ärqäb f.s., scorpion, pl. 'äräqqəb,

d. 'ärqebät.

'älläč c., foreigners, s. 'älläytay. wälwäl m.s., breeze, pl. wälawəl, d. wälwelay.

CäCCäCät

dägdägät, dusty place, pl. dägäddəg. sälsälät, chain, bracelet, pl. sälsälotat.

mäsdärät, waistcoat, pl. mäsadər/ mäsdärotat.

'änşäbät, sinew, 'änäşşəb, d. 'änşabätit.

CäCCaC

bärrad m.s., tea-kettle, pl. 'äbərdät/bärarid/bärärrəd.

tämsal m.s., reflection, pl. tämässal. dällal/dällalebay c./m.s., agent, middle man, pl. dälalib (or dällal).

šäqqat c., merchants, s. šäqqatay/ šäqqatebay.

källat c., earthenware, s. källetay. 'äddam m.s., person, pl. 'äddamat, d.(p.?) 'äddemay.

'äššam c., precious stones, s. 'äššemät.

'änğab c., teeth, s. 'änğebät, d. 'änğebätit, d.p. 'änğebat(cf. nibät). härmaz m.s., elephant, pl. härämməz, d.p. härmezam.

'änşay f.s., mouse, pl. 'änäşşit, d. 'änşeyät, d.p. 'änşeyat.

'ärqay m.s., bed, pl. 'ärqayotat.

CäCCiC(ät)

bärmil m.s., barrel, pl. bäramil, d.

CäCCiC(ät)—(cont.)

bärmilay/bärmiletay, d.p. bärmilam/bärmiletam.

säkkin m.s., dagger, pl. säkakin.

šägʻit/šäqlit m.s., pad for carrying loadonhead, pl. šäqällit/šägʻitotat.

ğämbil/zämbil m.s., basket, pl ğänabil/zänabil.

mäskin/mäškin m.s., poor man, pl. mäsakin/mäšakin, d. mäskinay, f. mäskinät.

mändilät m.s., scarf, pl. mänadil. mäntig m.s., bow and arrow, pl. mänatig.

CäCCeC

mämfet f.s., sieve, pl. mänäffit, d. mämfetät.

'äffet f.s., doorway, pl. 'äfyat/
'äfättit, d. 'äffetät, p. 'äffetay.

'ärket f.s., a measure, p. 'äräkkit, d. 'ärketät, d.p. 'ärketat.

CäCCuC

tämbuk c., kind of tree, s. tämbukät/ tämbukay (tree/wood), d.p. tämbukat.

därbuš m.s., Dervish, pl. därabuš. tärmuz f.s., bottle, pl. täramuz/ täramiz, d. tärmuzät.

sämbuk, f.s., boat, pl. sänabik.

sämbu' f.s., lung, pl. sänäbbə', d. sämbu'ät (or s. 'a piece of . . .').

sänduq m.s., coffer, chest, pl. sänaduq.

šärmuţ f.s., prostitute, pl. šäramuţ,/
šäramiţ, d. šarmutät.

mäfrud m.s., half-grown camel, pl. mäfarid, d. mäfruday, d.p. mäfrudam.

mäšruf m.s., food, pl. mäšarif. mäkruh m.s., evil-doer, pl. mäkarih,

makrun m.s., evil-doer, pl. makarii d. mäkrəhetay.

mänduq m.s., gun, pl. mänaduq, d.(p.?) mänduqay.

CäCCoC

gämrot s., kind of tree, s. gämrotät. mäskot f.s., window, pl. mäsakut, d. mäskotät.

CaCCVC

bayhot m./f.s., jackal, pl. bayhotat, d. bayhotay/bayhotät, d.p. bayhotam/bayhotetat.

dander c., kind of tree, s. danderät/danderay (tree/wood).

ğardin m.s., garden, pl. ğäradin. qandel f.s., small lamp, pl. qandelotat, d. qandelät.

'ankel m.s., circle, pl. 'änäkkəl.

CoCCVC

koskos m.s., pot for roasting coffee, p. käsäkkəs, d. koskosay/koskosetay.

CVCVCV(t)

badela/badelät f.s., spade, pl. badelatat/badelotat.

fälasit m.s., priest, pl. fälläs, d. fälasitav.

fätäna m.s., problem, pl. fätänotat. dəqala m.s., bastard, pl. däqällit, d. dəqeletay.

däbela m.d., he-goat, pl. däbällit, d. däbeletay, d.p. däbeletam.

sätäta m.s., grass tray for bread, pl. sätätatat/sätätotat.

säqäla m.s., roof, pl. säqällit, d. säqäletav.

käbäsa m.d., highland, pl. käbä-

käbäro m.s., drum, pl. käbärotat. gäzämo m.s., chopper, pl. gäzä-

motat, d. gäzämetay. gumare m.s., rhinoceros, pl. gumaretat.

gərade m.s., scimitar, pl. gəradetat. qəmito m.s., pile of grain, pl. qəmitotat.

GVCVCV(t)—(cont.)

mäşori m.s., strap-handle, pl. mäşawər.

mašela c., sorghum, pl. mäšälli, s. mašelät, d. mašelätit, d.p. mašelat. mäčarit f.s., top of jaw, pl. mäčärri. mäkina m.s., engine, pl. mäkayən/ mäkinotat (but mäkinät motorcar).

näṣāla m.s., robe, pl. näṣālatat.
'agele m./f.s., so-and-so, d. 'ageletay/
'ageletät.

häsäma m./f.s., pig, pl. häsämatat, d. häsemay/häsamätit, d.p. häsemetam/häsemetat.

häläqa m.s., pl. häläqatat. 'ägäba m.s., shield, pl. 'ägäbatat. 'äräqi m.s., anise, pl. 'äräqitat. wəšaṭe m.s., minor apartments, pl. wəšaṭetat.

wäreza m.s., bachelor, pl. wärazit, d. wärezetay, d.p. wärazitam. rämadi c., quitch grass, s. rämadität. yəhudi m.s., Jew, pl. 'äyhud.

CVCCVCV(t)

dənkəla m./f.s., kind of deer, pl. dənkəlatat, d. dənkəletay/dənkəlätit, d.p. dənkəletam/dənkəletat. tärqoba m.s., heel, pl. täräqqəb/tärqobatat.

sälsäla m.s., bamboo, pl. sälässəl. şərgəya f.s., highway, pl. şərgəyotat, d. şərgəyät.

käddamit f.s., servant, pl. kädäddam.

gəndə'e c., kind of tree, s. gəndə'etät. gərguma m.s., wind-pipe, pl. gäräggəm.

məsməsa m.s., reason, pl. mäsämməs. 'ämbäṭa c., locusts, s. 'ämbäṭetay.

'angera f.s., piece of bread, pl. 'änäggər, d. 'angerätit.

'änkäbot f.s., spider, pl. 'änäkkəb, d. 'änkäbotät.

'arbana m.s., pole of plough, pl.
'äräbbən|'arbanatat.

həmbaša f.s., wheaten bread, pl. hänäbbəš, d. həmbašätit.

həngora f.s., wooden spear, pl. hänäggər.

hərtuma m.s., shin-bone, pl. härättəm.

'äqhəma c., black ants, s. 'äqhəmät. 'əmboba c., flowers, pl. 'əmbobatat, s. 'əmbobät.

rəbbə'it f.s., measure, pl. räbäbbə'.

CVCVCCV(t)

dərə'to m.s., quilt, pl. därärə'. čäqämţe c., kind of tree, s. čäqämţetät.

šəgərti c., onions, s. šəgərtität. šərəbbe m.s., glass, pl. šərəbbetat. kərəmba m.s., cabbage, pl. kərəmbotat.

gərašša m.s., porcupine, pl. gəraššotat, d. gəraššetay, d.p. gəraššetam. modošša m.s., hammer, pl. modoššotat.

mäsänqo m.s., harp, pl. mäsänqotat. narəgge c., bitter orange, s. narəggetät.

härabso f.s., blister, pl. härabsotat, d. härabsotät.

häräwya m.s., wild pig, pl. häräwyatat, d. häräwyetay, d.p. häräwyetam.

CVCCVCCV(t)

baldänga c., beans, s. baldängät. bərkətta m.s., bread, pl. bäräkkət. çəmbəl'e c., butterflies, s. çəmbəl-'etät.

gämmänne f.s., lioness, pl. gämmännetat.

gəmfəlle m.s., thumb, pl. gəmfəlletat, d. gəmfəlletay.

mäntälle f.s., hare, pl. mäntälletat, d. mäntällätit, d.p. mäntälletat. 'äg'ərra m.s., herd, flock, pl. 'äg'ərrotat.

'ənqoqho m.s., egg, pl. 'ənqäwaqəh, d. 'ənqoqhotay, d.p. 'ənqoqhotam.

CVCCVCCV(t)—(cont.)

həmbərra m.s., navel, pl. həmbər-ratat.

'ərmədde c., supporting poles for plants, s. 'ərmədday, p. 'ərmeddetay.

CVCVCVC(ät)

bäţaţiš c., potatoes, s. bäţaţišät, d.p. bäţaţišat.

tälakəm m.s., husband's brother, pl. tälakmotat.

šäkänab f.s., pot, pl. šäkännəb, d. šäkänebät, d.p. šäkänebat.

gäräwin m.s., pick-axe, pl. garäwinotat.

gäräwan m.s., big tin, pl. gäräwanotat.

X məkəwal f.s., hiding place, pl. mäkawəl, d. mäkəwelät.

mäšeräb m.s., bodkin, pl. mäšarəb. mälasäs m.s., fly-whisk, pl. mälasäsotat, d. mälasesay.

'äräbiyät, hand-cart, pl. 'äräbiyotat, d.p. 'äräbiyetat.

CVCCVCVC(ät)

səlṭanyät, enamel pot, pl. səlṭan-votat.

ğälläbyät, long Muslim shirt, pl. ğälläbyotat.

mäd'ošat m.s., fireplace, pl. mäd'ošatat.

'ammolad f.s., midwife, pl. 'ammoladtat.

CVCVCCVC(ät)

qələnqal c., euphorbia, s. qələnqelät/ qələnqelay (tree/wood). mäzärgäf m.s., comb, pl. mäzäragəf. mətənkab f.s., ascent, pl. mätänakəb. mätär'äs m.s., pillow, pl. mätär'əs, d. mätär'esav.

məšəndäh f.s., cut on body, pl. mäšänadəh.

mäkästär m.s., brush, pl. mäkäsatər/mäkästrotat.

məgəssav f.s., seat, pl. mägasit.

mägälbäb m.s., head-scarf, pl. mägälabəb.

məhəngag f.s., scratch, pl. məhänagəg, d. məhəngegät.

mərəbbə'at f.s., stone house, pl. märäbabə', d. mərəbbə'atit, p. mərəbbə'etay, d.p. mərəbbə'etat.

'ädängäl c., French beans, s

härästay m.s., farmer, pl. härästot.

CVCCVCCVC

'ənqər'ob f.s., frog, pl. 'ənqər'obatat, d. 'ənqər'obätit, d.p. 'ənqər'obetat.

4 syllables

šəmagəlle c., nobles, s, šəmagəllay.
šäbänkälay m.s., young cattle, f.
šäbänkälit, pl. šäbänkälatat.

čəmbərrə'o f.s., little finger, pl. čəmbərrə'otat, d. čəmbərrə'otät. mäkäyäli m.s., measure, pl. mäkayel.

mäkäyäh m.s., measure, pl. mäkayet. mäkärkähit f.s., knocker, pl. mäkärakəh.

mäkäškäšit f.s., pot for roasting coffee, pl. mäkäšakəš.

märawito f.s., chameleon, pl. märawitotat.

'äbgəhäru m.s., male baboon, pl. 'äbgəhärutat, d. 'äbgəhärutay, d.p. 'äbgəhärutam.

'uralali m.s., bat, pl. 'uralitat.

ADJECTIVES

The adjectives are listed under headings that refer to the sections of \S 8. Since the patterns can be discovered by reference to these sections, all the forms are not given, but only the masculine singular form. Adjectives which have individual patterns are quoted only in \S 8, and not restated here.

Like gäzif 'thick' § 8.1 (i):

```
sähih
                                      märir
                                                bitter
            narrow
sälim
            black
                                      mätiq
                                                fresh (milk)
gätin
            thin
                                      räyim
                                                tall, distant
qälil
           light (weight)
                                      rəhib
                                                wide, large
hačir
            short
```

Like wäğib 'fertile', § 8.1 (i):

də'if weak

Like gädud 'barren', § 8.1 (i):

näqu' fresh (of first water coming from spring after rain)

Like hänkiš 'with a limp' § 8.1 (ii):

hänkil with a twisted limb

Like kəbud 'heavy' § 8.2 (i):

bərud	cold	şəgub	rich
bərur	single	kəbur	important (man)
tərud	strong	gəmuş	poor
d əbur	poor	gəlul	foolish
dəḥur	low	<i>ḥəfun</i>	hot
ṭəlul	wet	rəḥuq	far
sədud	needy	'əşuf	double
səmum	dead	yəbus	dry
sətur	unclear (speech)		•

Like dəngur 'slow', § 8.2 (i):

dəqqub	strong	'əddub	obedient
səlṭun	quick	'əzzuz	obedient
gəlbub	dull (skv)		

Like 'awur 'blind', § 8.2 (i):

ţə'um	sweet	wəqul	high
həwuz	fat	-	

Like bəzuh 'many', § 8.2 (i):

šəluḥ	thin	məlu'	full
kəfu'	bad	rətu'	right
qəluʻ	clear (speech)	rəsuḥ	dirty

Like 'akkuy 'bad', § 8.2 (i):

nəwnuy (nunuy) a little sorry

Broken plurals were also noted for kəbud, gəlul, gəmuş, and 'əwur, (class XI gälayəl, &c.) and for ṣəgub, kəbur, and gəmuş (class XXI ṣäggäb, &c.).

Like haməq 'weak', § 8.2 (ii):

barəh	light (opp. dark)	mašəq	looking tired
ṭafəḥ	smooth	hadə'	quiet
dafə'	plump (animal)	hagəl	poor
šafəq	quick	rakəb	rich
kaməl	productive (plant)	ratə'	fairly well off

Like hayəs 'noble', § 8.2 (ii):

qayəh pregnant

Like čäggar 'hairy', § 8.2 (ii):

däbbas	hunch-backed	gäbbah	with large forehead
<i>şäffa</i> r	with long nails	gänna d	strong
čäbba'	with six fingers	'äddag	slow
ğällal	brave	'äggar	on foot

APPENDIX

TECHNICAL TERMS

Some of the technical terms used in this study may be unfamiliar to the reader, and others are used in a sense that is specific to the analysis of the Tigre noun. For convenience, therefore, a list and a brief explanation are given below of some of the terms that may cause difficulty.

- animate. Animate nouns refer to animate beings and are formally defined by the fact that their plural forms have plural concord and the same gender as the singular forms. Cf. inanimate.
- cluster. A consonant cluster is a sequence of two consonants (phonologically), which may be different or the same (a 'double' consonant). It excludes gemination, q.v.
- collective. Collectives are one of the derivative classes; they are all singular forms, not used with any numerical reference, and formally defined by their non-occurrence with numerals.
- countable. Countable nouns are those whose singular form is singulative.
- derivative. The derivatives are those classes dealt with under the analysis of the second type of formation—singulatives, diminutives, &c.
- exponent. Phonetic exponents are the phonetic characteristics of a phonological or morphological element.
- gemination. Geminated consonants are doubled consonants that are morphologically a single radical. Cf. cluster.
- inanimate. Inanimate nouns refer to inanimate beings and are formally defined by the fact that their plural forms have masculine singular concord.
- lexically quotable. The lexically quotable forms are those which would form the 'head' of a dictionary entry. If a noun has a singular form, this form is lexically quotable; but many nouns have no singular form—a suffixed form is quotable.
- plural. The term is used in three distinct senses, all clearly marked by the context. (i) Plural forms, which include broken plurals and suffixed plurals, are defined morphologically. (ii) Plural concord, in the category of number, is defined syntactically, in terms of concord with adjectives and verbs; p. in the abbreviations m.p. and f.p. refers to plural concord. (iii) Diminutive plurals and pejorative plurals are derivative classes.
- prosodic. Prosodic relations are those not statable wholly in terms of vowels or consonants, involving, for example, 'backness', 'frontness', &c.

- radical. The radicals are those elements, mainly consonants, that are shared by the forms of a single noun.
- singular. The term is used in two distinct senses, both clearly marked by the context. (i) Singular forms are defined morphologically, being the forms (excluding the broken plurals) that have no suffixes. Singular forms may be either collective or singulative in the derivative classification. The lexically quotable form is not always a singular form. (ii) Singular concord, in the category of number, is defined syntactically in terms of concord with adjectives and verbs; s. in the abbreviations m.s. and f.s. always refers to singular concord.
- singulative. Singulatives are one of the derivative classes. Some of them are singular forms, others have suffixes. They have the meaning 'one' (except when preceded by a numeral), and are formally defined by their regular use with numerals.
- uncountable. Uncountable nouns are those whose singular forms are collectives.