# THE MORPHOLOGY <br> OF THE TIGRE NOUN 

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LONDON<br>OXFORD UNIVERSITY PRESS<br>NEW YORK TORONTO I962

# Oxford University Press, Amen House, London E.C. 4 

GLASGOW NEW YORK TORONTO MELBOURNE WELLINGTON bombay calcutta madras karachi lahore dacca CAPE TOWN SALISBURY NAIROBI IBADAN ACCRA kUALA LUMPUR HONG KONG

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## ACKNOWLEDGEMENTS

I wish to thank, first, Mr. Lijam Ishaq, whose patience alone made research into Tigre possible. I am most grateful, too, to my colleagues at the School of Oriental and African Studies, with whom I have discussed many of the problems raised by this research. Finally, thanks are due to the School of Oriental and African Studies, which not only permitted and financed my year's work in Eritrea, but has also borne the cost of the publication of this study.
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. ${ }^{1}$ 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 ${ }^{5}$ was provided at my request by the Rev. Clarence Duff of the

[^0]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. ${ }^{1}$ The Grammatica della lingua tigre ${ }^{2}$ and the more recent $A$ Grammar and Vocabulary of the Tigre Language as spoken by the Beni Amer ${ }^{3}$ 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. Höfner ${ }^{5}$ 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

[^1]ways in which Tigre differs from the other Ethiopian languages. Some acute, though brief, observations were made by Sundström in 1914; ${ }^{1}$ 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, I.
${ }^{2}$ New York Public Library, 1944.

## 1

## PHONOLOGY

## 1.r. Consonants

The consonants are:
$f$ voiceless labiodental fricative
$b$ voiced bilabial plosive
$t$ voiceless dental plosive
$d$ voiced dental plosive
$t$ ejective dental plosive
$s$ voiceless alveolar fricative (blade-alveolar, 'sibilant')
$z$ voiced alveolar fricative
$s$ ejective alveolar affricate
$\check{s}$ voiceless palato-alveolar fricative
$\check{z}$ voiced palato-alveolar fricative
$\check{c}$ voiceless palato-alveolar affricate
$\check{g}$ voiced palato-alveolar affricate
$\stackrel{c}{c}$ ejective palato-alveolar affricate
$k$ voiceless velar plosive
$g$ voiced velar plosive
$q \quad$ ejective velar plosive
$m$ voiced bilabial nasal
$n$ voiced dental nasal
, glottal plosive
$h$ breath ('voiceless glottal fricative')
$h$ voiceless pharyngeal fricative
voiced pharyngeal fricative
$r$ voiced alveolar trill
$l$ voiced (clear) alveolar lateral
$y$ palatal semivowel
w 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 $\ddot{z}$, the diagram is complete except for the absence of a labial ejective: ${ }^{1}$

|  | Voiceless | Voiced | Ejective |
| :--- | :---: | :---: | :---: |
| Labial | $f$ | $b$ | - |
| Dental | $t$ | $d$ | $t$ |
| Alveolar | $s$ | $z$ | $s$ |
| Palato-alveolar | $\check{s}$ | $\check{g}$ | $\check{c}$ |
| Velar | $k$ | $g$ | $q$ |

Another classification would be in terms of 'palatalized' and 'nonpalatalized' consonants, though this is essentially 'morpho-phonological'; ${ }^{2}$ but it is only as a palatalized form of $z$ that $z$ 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 $\ddot{a} .^{3}$

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

[^2]functions of the two types of vowels in the syllabic structure of the word. ${ }^{1}$

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
$\ddot{a}$ 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 .

### 1.3. Syllabic structure

The syllabic structure of the word may be interpreted in terms of syllable types $C V$ and $C V C$. Three further points may be noted.
(i) The short vowels do not appear in word-final $C V$ syllables.
(ii) The long vowels rarely appear in $C V C$ syllables, except where these are word final.
(iii) The vowel $\partial$ 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 $C V$ and $C V C$ syllables). For instance, in a word of the structure $C V C V C V$ it follows that a may be the vowel of the first syllable only, as in qamito 'pile of grain'; it will not occur in the other syllables, since the absence of a vowel in these

[^3]would imply the structures $C V C C V$ and $C V C V C$ (whereas its absence in the first implies the 'impossible' $C C V C V$ ). This characteristic of $a$ is of importance to the morphology since the presence of a suffix alters the syllabic structure; patterns of the type faras, farsotat, 'horseman', 'horsemen', are common. ${ }^{\text {I }}$
(iv) There is a special problem concerning the palatal semivowel 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. qätlayt 'murderess' (qätlay 'murderer'). ${ }^{2}$ 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 $\check{z} .^{3}$ For as long as the transcription must be in $C V$ and $C V C$ terms only, these can be written only as single letters; but if $C V C C$ is permitted, might not these be written as $t y$ and $z y$ ? Instead of 'äbäč we could write *'äbäty. ${ }^{4}$ In fact, this would confuse rather than simplify the statement since:
(a) a form such as hälčes 'my maternal aunt' would have to be rewritten hältye, with a non-final CVCC syllable;
(b) $\check{c}$ is morphologically not always $t y$, but also (though rarely) $y t$, as in 'äqqäč but 'äqqaytay and 'äqqaytu ('soldiers', 'soldier', 'his soldiers'). ${ }^{6}$ 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; ${ }^{7}$ 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

[^4]ones; a single $r$, for instance, may have only one or two taps, while a double $r r$ has four or more. Double $q q$ even when intervocalic is velar. The laryngeals and semivowels are never double, with the exception that $y y$ is to be found at one type of stem-ending junction. ${ }^{1}$
(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 |
| languy ([घ] $]$ | 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 $-r n$ - alternates with $-n r$ - with the phonetic exponent [ndr]-e.g.
šarnay/šanray 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 $-g k$ - and $-q k$ - 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 structuree.g.

| beddagge | (bet dagge) | town house |
| :---: | :---: | :---: |
| beğğuk | (bet guk) | tribal name |
| ‘ässäb | ('äd säb) | civilized country |
| ' äzzämat | ('äd zämat) | land of Zamat |
| 'at karašša'ab | ('ot karas ša'ab) | within Sheeb |
| 'əffättika | ('ab fättika) | at your wish |

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

[^5]is still marked by glottal closure, though there is still 'assimilation' (this cannot be shown in the transcription)-e.g.
samat dagge 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:
'əmən or 'əbən stone

One informant produced the forms mänkinät (Lijam mäkinät) 'motor-car' and maskelät 'bicycle' (Italian bicicletta).
(ii) There was alternation in terms of voice and ejection with respect to two successive consonants of the same word in:

$$
\begin{array}{ll}
\text { fataq or fadag } & \text { creek } \\
\text { mastaq or masdag } & \text { cheek }
\end{array}
$$

A rather different pair is:
qasla or kasra kind of tree
The association of $l$ with $q$ and $r$ with $k$ is reminiscent of Bilin. ${ }^{1}$

## r.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.

| mäsni | [mesni:] | friend |
| :--- | :--- | :--- |
| sälsälätu | [selseletu:] | his bracelet |
| but | färäs | [feres] | horse

${ }^{1}$ Or, at least of $r$ with $x$ in Bilin as in dax ${ }^{w}$ ara, daqwal, '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 | [manka:] | spoon |
| :--- | :--- | :--- |
| sälsäläta | [salsalata:] | 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 [tekobata:] her mat

It follows that short vowels which are not fronted, retracted, or ( $a$ 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. ${ }^{1}$

This feature does not extend beyond the word, with one excep-tion-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.
mäbrohät la 'onas [mabrahat la: Pona: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 $\partial$ in the possessive suffix $k a m$ is such that it might be preferable to write it as $k u m m$ (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 $a$ 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 | [tJ'abel] | ashes |
| :--- | :--- | :--- |
| särit | [Jari:t'] | line ${ }^{\text {I }}$ |

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:

| ș̈̈mbuka | [sembuika:] | her boat |
| :--- | :--- | :--- |
| sänduqa | [sandu:k'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 $a$ 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 'ac̣äy 'wood' which is phonetically [Gətftf'et] where *[Gotft ['at] might be expected (the vowel of the last syllable being $a$ following an ejective). But the form is to be identi-
 and $y$ ); the only phonetic exponent of $y$ 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

| hämäǧ | commoner <br> 'วbən |
| :--- | :--- |
| 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 front ${ }^{2}-$ e.g.

| zärə' | [zerip] | seed |
| :--- | :--- | :--- |
| mäfroh | $[$ mefrih $]$ | frightening |
| garäh | $[$ gərah $]$ | field |

### 1.8. Intervocalic laryngeals

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

[^6]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, $a, \ddot{a}$, or $a$, or a choice could be made on each occasion on morphological grounds. In fact, in such cases $a$ 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 $a$ for instance in:
\[

$$
\begin{array}{ll} 
& \begin{array}{l}
\text { 'äzwa'at } \\
\text { cf. }
\end{array} \text { (*'äswaqat }
\end{array}
$$ \quad $$
\begin{aligned}
& \text { words (pl. of } \left.z u^{\prime}\right) \\
& \text { shops (pl. of } s u q)
\end{aligned}
$$
\]

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

| bo'วs | [bəPəs] | husband |
| :--- | :--- | :--- |
| ba'er | [beqear] | half-grown camel |
| fəhä̈m | [faћam] | charcoal |

The symbol $\partial$ is to be preferred to $\ddot{a}$ or $a$ because the vowel has the syllabic function of 2 -it occurs only where the absence of a vowel would imply syllabic structures not analysable into $C V$ and $C V C$. This is shown by
$m a ̈ s^{\prime} \partial n\left({ }^{*} m a ̈ s ̣ a ' \partial n, \mathrm{pl}\right.$. of mäṣ’än) loaded beasts
garhu (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, $a$ or (according to the syllabic structure) no vowel occurs-e.g.

$$
\begin{array}{llll} 
& \text { bazuh } & b_{\partial z h a m}{ }^{\mathrm{I}} \text { m.s. and m.p. } & \text { many } \\
\text { cf. } & \text { kabud } & k_{a b u d a m} & \text { heavy } \\
& b_{\partial g} g u^{〔} & b_{\partial g} g^{\circ} \partial t^{2}(\text { fem. }+\partial t) & \text { sheep }
\end{array}
$$

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

| bagga'utay | a little sheep |
| :---: | :---: |
| karkz'utay (kərku') | a little wax |

The suffix in comparable forms is -etay.

While, however, in the adjectives (bazuh, \&cc.) $u$ does not occur before any laryngeal, in the nouns (the only laryngeals noted in this connexion were $h,{ }^{\prime}$, and ') though $u$ does not occur before ', it does occur before ' and $h$, as in

| sämbu' | a lung | sämbu'ät | a little lung |
| :--- | :--- | :--- | :--- |
| luh | a plank | luhay | a little plank |

## 2

## 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
feminine. The fourfold possibility is illustrated by the demonstratives:

|  | sing. | pl. |
| :--- | :--- | :--- |
| masc. | 'alli | 'allom |
| fem. | 'alla | 'allän |

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.

$$
\begin{array}{lll}
\text { m.s. } & \text { färäs } & \text { horse (not necessarily stallion) } \\
\text { f.s. } & \text { färäs } & \text { mare }
\end{array}
$$

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 stick ${ }^{\mathrm{I}}$ |

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

[^7]related to the type of diminutive, ${ }^{1}$ 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. | darfon | m.p. | därafən | ram(s) |
| :--- | :--- | :--- | :--- | :--- |
| f.s. | dangal | 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 con-cord-e.g.

| m.s. | qa ̣̌al | 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. 'allän'äkanat those places

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

$$
\begin{array}{lll}
\text { m.s. 'alli 'äbyat } & \text { those houses } \\
\text { f.p. } & \text { 'allän 'äbyat } & \text { those nice houses }
\end{array}
$$

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

$$
\begin{array}{lll}
\text { m.s. } & \text { 'alli mäkayən } & \text { those machines } \\
\text { f.p. } & \text { 'allän mäkayzn } & \text { those motor-cars }
\end{array}
$$

[^8]
### 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; ${ }^{1}$ 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

## *hätte/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. ${ }^{3}$

[^9]
## 3

## 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; ${ }^{1}$ 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 -ät, or where there is no form with this suffix, the suffix -ay. These forms, though not singular forms, are all singulatives-e.g.

$$
\begin{array}{llc}
\text { wa'ät } & \text { (no form *wa') } & \text { cow } \\
\text { tästay } & \text { (no form *tästät or * täsat) } & \text { bull } \\
{ }^{1} \text { Except for the problematic forms dealt with in § 6.3.9. }
\end{array}
$$

## 4

## 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. ${ }^{1}$ 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. I. General characteristics

4.I.I. 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.r.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 |
| :--- | :--- | :--- |
| mändäq | mänadoq | wall |

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

| suq | 'äswaqat | shop |
| :--- | :--- | :--- |
| şgad | 'äsagdät | neck |
| dagge | dägäggit | town |

[^10]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 $-\ddot{̈} t$ 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 $-e-.{ }^{\text {I }}$ 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:

| $k i s$ | 'äkyas | pocket |
| :--- | :--- | :--- |
| qaror | qärawar | 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 labiovelar 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 $C a$ - (the laryngeal word initial and the vowel $a$ not $\ddot{a}$ )-e.g. ${ }^{2}$

|  | 'äsär | 'asur |
| :--- | :--- | :--- |
| häyät | hayut | track, footprint |
| cf. | lion |  |
| gäbäy | 'ägbuy | road |

[^11]B. 9948

The vowel is, for a few nouns only, not $a$ but $a ̈$-e.g.
häbäy häbuy monkey
(b) With an initial ejective, the prefix is, for some nouns only,


| qarad | 'äqrud | root |
| :---: | :---: | :---: |
| $c_{c}{ }^{\text {b }}$ 'it | 'äçabs' | 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.

| wahar | 'äwhorät | bull |
| :--- | :--- | :--- |
| sagad | 'äsogdät | neck |

(v) The term gemination is explicitly reserved for a phonetically long and phonologically double consonant that is also morphologically a single radical. ${ }^{2}$ It is indicated in the symbolization of the syllabic structure by $\overparen{C C}$, as opposed to $C C$ which represents a cluster, even of identical consonants.
We may contrast:

| karar | 'äkarrät | ('äCəCCät) | curtain |
| :--- | :--- | :--- | :--- |
| wärəq | 'äzärraq | ('äCäCCaC) | 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 $\mathrm{CäCaCə} \mathrm{C}$ and $C \ddot{a} C a ̈ C C \not \partial C$ as in: ${ }^{3}$

| masgod | mäsagad <br> qolc̣am | mosque <br> qüçc̣am |
| :--- | :--- | :--- |

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).

[^12]
### 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 $I-I X)$. The singular forms associated with these plural classes are almost wholly of the syllabic structure $C V C V C$ with the vowels of the first syllable restricted to $a$ and $\ddot{a}$ and those of the second to $\partial, \ddot{a}$, 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); ithis 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) | ğäfär | 'ägfar | side, coast |
| II (10) | motad | 'ämtud | stake |
| (4) | $q \ddot{l}{ }^{\text {a }}$ da | 'äqlub | wish |
| (10) | gäbäy | 'ägbuy | road |
| III (17) | barak | 'äbrak | knee |
| (3) | näfos | 'änfas | soul |
| (7) | sädäf | 'äsdaf | button |
| IV (2) | šaram | 'äšramat | pond |
| V (19) | sagad | 'äsagdät | neck |
| (2) | tänan | 'ätannät | smoke |
| VIII (5) | wäraq | 'äwärroq | silver |
| (13) | mädäf | 'ämäddaf | young ram |

Where the first radical is ejective (though only $q$ ), the prefix is, for some nouns, ' $\ddot{a}$ - --e.g.
(2) $q \partial t \partial b \quad$ ‘äqtub leg of bed
(ii) With an initial laryngeal, the first syllable of the plural form is, as already stated, $C a$ not ' $\dot{a} C$, and only classes II and III were noted-e.g.

| II (1) | 'olağ | 'aluğ | child, youngster |
| ---: | :--- | :--- | :--- |
| (1) | horäs | harus | stick (for beating) |
| (10) | 'ämät | 'amut | female slave |
| III (15) | 'okal | 'akal | corn |
| (1) | 'วyäb | 'ayab | sack |
| (3) | häbal | habal | rope |
| (2) | 'äsär | 'asar | track |

[^13]With $C \ddot{a}$, not $C a$, as the first syllable, plurals of classes III, V, and IX were attested--e.g.

| III (1) | 'ädag | 'ädug | donkey |  |
| ---: | :--- | :--- | :--- | :--- |
|  | (土) | häbäy | häbuy | monkey |
| V | (1) hawar | häwrät | foal |  |
| IX | (2) härəb | hä̈rrabat | water-skin |  |

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

$$
\text { ‘azal ‘äzallät } \quad \text { shade of tree }
$$

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

| I | (I) | $b a ’ s$ | 'äb'as | husband |
| :---: | :---: | :---: | :---: | :---: |
|  | (6) | bahär | 'äbhar | sea |
| II | (2) | såod | 'äs'ud | strong arm |
|  | (2) | dzhäb | 'ädhub | gold |
| III | (4) | raham | 'ärham | belly |
| V | (1) | wahar | 'äwharät ${ }^{1}$ | 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) | $f_{\text {fotah }}$ | 'äftahat | justice |
| :---: | :---: | :---: | :---: |
| $V$ (I) | $q จ w \ddot{a}^{\text {c }}$ | 'äqəw'ät | crane |
| (r) | $q a \ddot{y a}$ | 'äqəy'ät | vomit |
| IX (I) | gəma' | 'ägämma'ət | boulder |
|  |  | 'äsäffr'ət | winnowing tray |
| (I) | färä | 'äfärra'ət | branch of a family |

There is an alternative form of class IX-'ä $\mathrm{C} \Rightarrow C C_{ə} C a ̈ t$, 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 $-a ̈ t$ and $-a y$ only ${ }^{2}$ follow the patterns already noted-e.g.

(vi) There are a number of singular forms of the structure $C V C$, with $V$ a short vowel, that are morphologically to be regarded as $C V C C$ (which is not phonologically possible). ${ }^{1}$ In all examples but two we may establish identical second and third radicals-e.g.

| III | (6) | gəd | 'ägdad | cotton thread |
| :--- | :--- | :--- | :--- | :--- |
|  | (2) | sär | 'ä́srar | half |
| V (2) | gäs | 'ägosssät | 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 | gon | 'ägnad | border |
| :---: | :--- | :--- | :--- |
| V | qär | 'äqornät | 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):

| qoruš $^{2}$ | 'äqruš | dollar |
| :--- | :--- | :--- |
| 'zyot | 'ayut | lamb |
| yzhudi | 'äyhud | Jew |

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

| V | bärrad | 'äbardät | tea kettle |
| :---: | :--- | :--- | :--- |
| VIII | loddat | 'äläddot | door frame |
|  | täbbal | 'ätäbbal | milk jar of grass |
|  | näggäl | 'änäggal | 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 | cob ${ }^{\text {ºt }}$ | 'äčaba' | finger |
| ---: | :--- | :--- | :--- |
|  | baggu' | 'äbaga' | sheep |
| VII | bäsoh | 'äbashot | youth |

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

[^14]associated with a plural with the prefix ' $a$; 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 $I-I X$ ). The singular forms associated with these types of plural are almost all of the syllabic structures $C V C$ or $C V C V$. 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 $C V C$ only plural classes III, IV, and V were attested (with final laryngeal only IV)-e.g.

Non-laryngeal

| III | (1) | kis | 'äkyas | pocket |
| :---: | :---: | :---: | :---: | :---: |
|  | (2) | $b e t$ | 'äbyat | house |
|  |  |  | 'ätzat | dried sinew |
|  | (5) | kor | 'äkwar | pack saddle |
|  | (1) | suq | 'äswaqat | shop |
|  | (I) |  | 'ägzasat | side, face (of thing) |
| V | (1) | sol | 'äsazulät | pad for load on head |

Initial laryngeal

| III | (2) 'id | 'ayad | food offered to dead |
| :--- | :--- | :--- | :--- |
|  | (2) hol | hawal | year |

Final laryngeal

$$
\text { IV (2) } z u^{6} \quad \text { 'äzwa'at word }
$$

With no (unsuffixed) singular
III (1) nibät 'änyab ${ }^{1}$
(1) šoqät 'äšwaq
canine tooth
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) | dos | 'ädyas | saucepan |
| :--- | :--- | :--- | :--- | :--- |
|  | (2) | som | 'äsmay | name |
| IV | (1) | roh | 'ạrwahat | soul |

[^15]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). ${ }^{1}$
(iii) With singulars of the structure $C V C V$ 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) | mase | 'ämsuy |
| ---: | :---: | :---: | :--- |
| III | (1) | lahe | 'älhay |
|  | (I) saga | 'äsgay | molar |
|  | (I) | meat |  |

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

| ğəna | 'äğännit | 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
4.2.3. Plurals of the structures $C a ̈ C a C V C / C a ̈ C a ̈ C C ə C$ and $C a ̈ C a ̈-~$ CaCa C (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), $C V C V C V C$ (iv), and $C V C V C C V C(\mathrm{v})$.
The distinction between geminated and non-geminated forms of the plural does not reflect any corresponding difference in the singular forms except that with $C V C C V C$ singulars (a) all singular forms with initial $m \partial$ - 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 $C V C C V C$ are associated

[^16]with plurals without gemination-XI-XIII. The feature that distinguishes these three classes of plural is the vowel of the final syllable- $-i, i$ 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 $a(\mathrm{XI})$ 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 $\partial$ and $\ddot{a}$, 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. ${ }^{1}$-e.g.

Central-central

| IX (8) | masgod | mäsagəd | mosque |
| :---: | :---: | :---: | :---: |
| (2) | mәdmä ${ }^{6}$ | mädama | blow |
| (19) | masmar | mäsamər | nail |
| (5) | mäftoh | mäfatə̣冖 | key |
| (29) | gäņ̆är | ğänağar | chain |

## Front-front

XII (2) tawit² täzwawit cartridge
(2) bastan bäsatin garden
(4) bärmil bäramil barrel

Back-back
XIII (1) katkut kätakut young bird
(5) 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) katkut kätakit ${ }^{3}$ young bird
(7) sämbuk sänabik boat
${ }^{\text { }}$ Cf. 'Broken plurals', pp. 552-3, where it functions in both central and back systems.
${ }^{2}$ i.e. *tawwit, 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 mastir.
${ }^{3}$ 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) 'atfayät 'ätafa' hearth stone
XII (土) mändilät mänadil scarf
(1) naggarät 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. a, there are no prosodic relations to be noted-e.g.

Central

| XIV_(14) | darfon | däräffon | ram |
| ---: | :--- | :--- | :--- |
| (4) | dammäl | dämämmal | vengeance |
| (1) | đällas | ‘älällas | hawk |
| (9) | tärkäzz | täräkkaz | heel |

Front

| (1) | honziz | hänäzzaz |
| ---: | :--- | :--- |$\quad$ cockchafer

Back
(6) šangul šänäggal young man
(1) sämbu' sänäbba'
lung
(1) koskos ${ }^{2}$ käsäkkas
pot for roasting coffee
The nouns with no (unsuffixed) singular forms are of similar pat-terns-e.g.
(5) tankollät tänäkkal
(2) dorbobät däräbbob
(1) zannabät zänännab
(2) dägdägät
dägäddag
plait
ant-hill
head scarf
dusty place
${ }^{1}$ 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 $C V C C V C$ ). 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 $C V C C V C V$ only class XIV plurals were noted-e.g.

| (I) $m$ | mäsämmas | cause |
| :---: | :---: | :---: |
| (1) sälsäla | sälüssal | bamboo |
| (2) hımbäša | hänäbbas | wheaten bread |
| (1) 'angera | 'änäggar | bread |
| (1) hongora | hänäggar | wooden spear |
| (1) tärqoba | täräqqab | heel |
| (2) garguma | gäräggam | wind-pipe |

Examples with a final - $t$ are rare:

| (1) | 'änkäbot | 'änäkkab | spider |
| :--- | :--- | :--- | :--- |
| (1) | käddamit | kädäddam | servant |
| (1) | rabba'it | räbäbba' | 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 (土) məkawal mäkawal
(1) mäšeräb mäšarəb

XIV (1) säkänab s̈äkännzb
hiding place bodkin pot

A unique pattern is that of: mäkäyäli mäkayal 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 $C V$ syllable-e.g.

XV (1) məšəndäh mäs̆änadəh cut (on body)
(2) mahəngag mahänagag scratch
(1) mäzärgäf mäzäragaf comb

Also noted with the same plural was one noun with no (unsuffixed) singular, and two with the further ending - $i t$ :-
(1) mrrabbo ät märäbabo‘ stone house
(2) mäkäškäšit mäkäăsakaš coffee roaster
4.2.4. Plurals with the structures $C a ̈ C a C V C / C a ̈ C a ̈ C C ə C$ (classes $X I-X I V)$ : radicals not wholly consonantal. The singular forms associated with the plurals of these types are almost all of the structure $C V C V C$, 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 $\partial$ 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 semivowel in the plural-e.g.

| XI (4) | wohiz | zvahayzz ${ }^{\text {r }}$ | stream |
| :---: | :---: | :---: | :---: |
| (2) | ğznen | ğänayzn | garden |
| (14) | näwid | näwayad | kid |
| (I) | käleb | kälayab | 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 again ${ }^{2}$ there are back-front relations between the two formse.g.

XI (2) 'aquq ‘äqayaq flat field in valley
(4) hädud hädayad thunder

One example of a back-back pattern was noted:
qarar qärawar bottle

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

| XI (3) | sagadät ${ }^{3}$ | sägayad | ascent |
| :---: | :---: | :---: | :---: |
| (3) | däkilät | däkayal | peace-making |
| (1) | särerät säreray | särayar | bird |
| (1) | täkobät | täkayab | grass mat |
| (1) | mäsori | mäsawor | strap |

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

[^17]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 |  | qoba ${ }^{6}$ | $q \ddot{a} w a b{ }^{\text {a }}$ | hat |
| :---: | :---: | :---: | :---: | :---: |
|  | (3) | kokäb | käzwakab | star |
| XIV | (2) | moqzh | mäwäqqəh | fetter |
|  | (3) | šokän | šäwäkkan | antelope |
|  | (3) | rošan | räwäššn | storied building |
|  | (1) | horzmmät | häzuärram | 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 (I) | birob | bäwarab | 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 täkayas 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

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-backfront.

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 däräwah 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 $\operatorname{CäCaCi(t)/CäCäCCi}(t)$ (classes $X V I-X I X)$. The majority of the singular forms associated with these types of plural are of the structure CVCCV ; a smaller number have the structure $C V C V C V$. Others are of the pattern $C V C V$, 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.


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) | qambet | $q$ qänäbbi | backyard |
|  | (2) | tagrat | 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 $\mathrm{CäCäCCiC}-\mathrm{e} . \mathrm{g}$.

| XIX (土) | karbit | 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 |
| ---: | :--- | :--- | :--- |
| XVIII | (1) | mašela | mä̌hëlli |
| XIX | (1) daqala | däquällit | sorghum |
|  | (1) säquard |  |  |
|  | (I) däbela | säqüllit | roof |
|  | däbällit | he-goat |  |

One example of a noun with a final $-t$ in the singular was noted:
XVIII mäçarit mäc̣ärri 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 XVIIIe.g.

| (2) | dosa | däwässi | hut |
| :--- | :--- | :--- | :--- |
| (1) | tišo | täwässsi | pot |
| (1) 'ela | 'äwälli | well |  |
| (2) | qeṭo | qüzaäṭi | arm-chair |

There are singular forms with a final $-t$ (and one with a final -ät).

| (1) | qisot | $q u ̈ z w a ̈ s ̌ s i ~$ | village |
| :---: | :---: | :---: | :---: |
| (1) | 'esat | ‘äzässi | back |
| (I) | konat | käwänni | spear |
| (I) | korit | käwärri | ball |
| (1) | qogät | qäzöggi | kind of tree |

One noun of a similar pattern was noted, but with the semivowel as the third consonant of the plural form:
(iv) Some nouns with these plurals have a palatal semivowel in the singular form-e.g.

| XVI | (2) | ma'tay | ma'ati | entrance |
| :---: | :---: | :---: | :---: | :---: |
| XVIII | (1) | dabbayät | däbäbbi | ambush |
|  | (1) | foqäy | fäwäqqi | top of shoulder |
| XVII | (1) | faluy ${ }^{1}$ | fälayit | half-grown calf |
|  | (1) | sämuy | sämayit | cattle trough |
| XIX | (6) | čançay | çänạ̈̆̌̌̌it | fly |
|  | (2) | ‘änṣay | ‘änäsṣit | mouse |

The class XVIII forms could be treated as having a fourth radical $y$; they would then belong to class XIV-*däbäbbay, *fäwäqqəy. 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 $y t$, 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 | hägäggi | speech |
| :---: | :--- | :--- | :--- |
|  | mäbäl | mäbälli | widow |
| XVIII | hommäm | 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- Ca Ca C and CäCCäC-e.g.

XX
(4) 'วgar
(I) $\mathrm{sol}^{3}$
'ggär
sazäl
foot pad for load on head

[^18]| XXI | （土） | nagus | näggäs | king |
| :--- | :--- | :--- | :--- | :--- |
|  | （土）fälasit | fälläs | priest |  |
|  | （土）šum | šäyäm | chief |  |

The class XX forms raise a problem in the morphological state－ ment 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 singu－ lative－e．g．

| singulative | $z a b d a ̈ t$ | a piece of butter |
| :--- | :--- | :--- |
| collective | $z a b a ̈ d$ | 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－ät．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 singu－ lar forms in any＇regular＇way．These are－

| （III） | gä＇ | ＇äg＇at | black lizard |
| :--- | :--- | :--- | :--- |
| （III） | tälit | ＇atal | she－goat |
| （VI） | wälät | ＇äwalad | daughter |

Some forms have a suffix－$t$ or ät that is not usually found with the plural form：

| （XI） | mäbrahät | mäbarhat | lamp |
| :--- | :--- | :--- | :--- |
| （XI） | mänfa＇ät | mänaf＇ät | profit |
| （XI） | mämhər | mämharät $t^{2}$ | teacher |

Two nouns were noted with a final $-b$ instead of $-t$ in the plural form：
（XVII）faytät fätayib prostitute
${ }^{\text {I }}$ i．e．＊säyyäm（ $y$ not geminated）．
agent，middle man
${ }^{2}$ i．e．＊mämaharät．
B． 9948
D
(iii) Plurals that are wholly idiosyncratic and do not resemble any of the patterns noted are:

| 'ode | 'odäy | hand |
| :--- | :--- | :--- |
| hu | häzw | brother |
| woüd | wvalad | son |
| hot | häwat | sister |
| zabot | zabbat | officer |
| 'วgal | 'agal | 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:
'วnas ${ }^{2}$
'วssit
wə'ät
nə'ät
säb
'änas
'äha
'onsa
man
woman
cow
camel

[^19]
## 5

## 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.I. 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. | häräwya | m.p. | häräwyatat | wild pig |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | f.s. | katra | f.p. | katratat | pigeon |
| (der.) | m.s. | 'วnas ${ }^{\text {r }}$ | f.p. | säbetat | man |
|  | /f.s. | 'agal | f.p. | 'agelat | 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 $\check{c}(\ddot{a} c \check{c})$; this occurs elsewhere only as the palatalized form of $t{ }^{3}$
5.1.3. Meaning. Like the broken piurals, the suffixed plurals
${ }^{\text { }}$ See above, § 4.2.6 (iv).
${ }^{2}$ Cf. §6.3.7. ${ }^{3}$ Cf. §§ I .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 . . $\therefore$ '

### 5.2. Analysis of the suffixed plurals

The classification is wholly in terms of the type of suffix.
5.2.1. Suffix -äč. ${ }^{2}$ Only three forms in which the suffix is additional to a singular form were noted:

| 'äf | 'äfäč | mouth |
| :--- | :--- | :--- |
| 'äb | 'äbäč | 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 |
| härmay | härmäč | 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:

| härästay | harastot | peasant |
| :--- | :--- | :--- |
| watay | watot | 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 $C V C$ or $C V C V C$ 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 ‘ällać; 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.

| masli | maslitat | image |
| :--- | :--- | :--- |
| gamfalle | gamfalletat | thumb |

(iii) It was rarely found with nouns whose lexically quotable form has the suffix -ät. Examples noted were:
(1) nälät
nälat
(2) šakät šakat
kind of deer
grassy watering-place
(iv) A more complex pattern is found with examples such as the following:

| (1) fare | frryat | corn |
| :---: | :---: | :---: |
| (1) hägo | hägzat | belt of beads |
| (1) lim | lämyat | cream |
| (1) šäwet | säzuyat | ear of corn |
| (1) satet | 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. ${ }^{\text { }}$

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

$$
\text { tokay } \quad \text { takyat } \quad \text { pillar of house }
$$

(v) The suffix is also found with:

| 'am | 'ammat | mother |
| :--- | :--- | :--- |
| 'on | 'ontat | eye |

In dealing with the broken plurals mention was made of similar nouns with singular forms which are phonologically $C V C$ but morphologically $C V C C .{ }^{2}$
5.2.4. Suffix -otat. This suffix is found with nouns whose singular or quotable forms are of several types.

[^20](i) It is common with nouns which have a quotable form with suffix -ät-e.g.

| (2) $s s^{\text {ca }}$ ät | sa'otat | watch |
| :---: | :---: | :---: |
| (1) sänät | sänotat | year |
| (2) 'ämmät | 'ämmotat | paternal aunt |
| (5) 'adät | 'adotat | custom |
| (5) täblät | täblotat | lock |
| (1) kafyät | kofyotat | Muslim's hat |
| (1) ḥmmärät | hommärotat | baobab |
| (2) sälsälät | sälsälotat | necklace, watch chain |
| (1) `äräbiyät | 'äräbiyotat | hand-cart |
| (1) gälläbyät | gälläbyotat | Muslim shirt |
| (1) saltanyät | saltanyotat | enamel pot |

(ii) It is the only plural form associated with singulars of the type:
(8) gadam
gadmotat
plain

Note also
(1) tälakam tälakmatat husband's brother
(iii) Other plurals with this suffix are:

|  | hal | halotat | maternal uncle |
| :---: | :---: | :---: | :---: |
| (I) | 'äm'al ${ }^{\text {r }}$ | äm'slotat | day |
| (1) | ‘ärqay | 'ärqayotat | bed |
| (2) | qandel | qandelotat | small lamp |
| (1) | gäräzan | gäräwanotat | big tin |
| (I) | gäräzin | gäräwinotat | pick-axe |
| (1) | 'zmmolad | 'ammoldotat | midwife |

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

| (1) badela | badelotat | shovel |
| :--- | :--- | :--- |
| (2) fätäna | fätänotat | problem |
| (1) karamba | karombotat | cabbage |
| (1) 'äg'arra | 'äg'ərrotat | herd |

(v) Some nouns with a phonologically $C V C$ but morphologically $C V C C$ singular form were noted:

| häl | hältotat <br> $\stackrel{a}{d} d$ | maternal aunt <br> country |
| :--- | :--- | :--- |

[^21]We must also note:

| nəⓐ̆l | na ${ }^{\text {ältotat }}$ | 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 $C \ddot{a} C a C$, and the plurals have the suffix -ät 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 qütlayt murderer, murderess
We have already noted the syllabic peculiarity of the feminine form. ${ }^{1}$
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.

[^22]
## 6

## 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 $-a y,-a ̈ t,-a m$, and $-a t$ and the much rarer $-i t$, and secondly, $-a ̈ t i t$, which is clearly to be regarded as a double suffix composed of $-a \ddot{t}+-i t$; 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 $-a m$ 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:

| $-a ̈ t$, it, and -ätit |  | f.s. |
| :--- | :--- | :--- |
| $-a t$ and -etay |  | m.s. |
| $-a t$ and -etat | (animate) | f.p. |
|  | (inanimate) | m.s. |
| $-a m$ and -etam | (animate) | m.p. |
|  | (inanimate) | m.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.) | fohäm | charcoal |
| (sing.) | fähmät | 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 häbbeyam | monkey |
| :--- | :--- | :--- | :--- |
| But häyät häyetay |  |  |
| hayut (br. pl.) |  |  |

(ii) Where the singular form ends in a vowel, there is the juncture feature of a voiceless dental stop $t$-e.g.
so'li so'lität picture
(iii) Many of the derivatives have the vowel $e$ in place of $a, \ddot{a}$, 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.

|  | 'anas | 'anesay | man |
| :---: | :--- | :--- | :--- |
| (färäs) | däbna | däbnetay | rain cloud |
|  | '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

[^23]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.
baläq bälqät rock
ğəban ğäbänät coffee-pot
These exemplify only $\ddot{a}$ in the suffixed form. Examples with $\partial$ 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 $\partial$ ) and even with a combination of both-e.g.

| (iii) | färäs | färresay | horse |
| ---: | :--- | :--- | :--- |
| (iv) | 'əban | 'əbbänät | stone |
|  | šetan | setönnay | devil |
| (iii) + (iv) | rošan | rošznnetat | storied building |

6.I.3. Meaning. The meanings of the derivatives are varied but fall into four different categories-sex, quantity, quality, and size. The possibilities are:
sex-male or unstated, female quantity-unstated, one, a few, many
quality-unstated, bad
size-unstated, small, very small, large
Sex is associated mostly with the gender of the singular form, though there is no one-to-one gender-sex relationship. ${ }^{1}$ Many nouns that refer to domestic animals have a form with the suffix $-a ̈ t$ or $-a t$ that specifically refers to the female-

| kälab | kälbät | dog/bitch |
| :---: | :---: | :---: |
| näwid | näzvidät | kid |
| ${ }^{\prime} \ddot{a b}^{\text {d }}$ g | 'ädgat | donkey |
| baggu ${ }^{\text {c }}$ | bagga'ot ${ }^{2}$ | sheep |

[^24]${ }^{2}$ 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 $-\partial t$, 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; näwayad, 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:

| häsin $(\mathrm{m})$. | iron | häsinät | quality of iron |
| :--- | :--- | :--- | :--- |
| häsur $(\mathrm{m})$. | fence, zariba | häsurät | branch used for fence |
| mätba $(\mathrm{m})$. | stamp, seal | matba‘ät | printing-press |
| mäkina $(\mathrm{m})$. | 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 |
| :--- | :--- | :--- |
| katab | katebay | book |

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

| färad | färreday | revolver |
| :---: | :---: | :--- |
| säfo' | säf'etay | winnowing tray |

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

| zabäd | zobdät | butter |
| :--- | :--- | :--- |
| çagär | çggärät | 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 <br> 'änhebat | a few bees |
| :--- | :--- | :--- | :--- |
| wa'ät | a cow | wa'etat <br> wa'at | a few cows |
| laban | incense | wabanät <br> lonas | a 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 -ät or -äy. The gender of forms with -it and with -ät 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. qalçam a wrist qalčammay a strong wrist
fahäm charcoal

| qolčemay | a weak wrist |
| :--- | :--- |
| fähmay | a large piece <br> of charcoal |
| fähmetay | a poor piece <br> of charcoal |
| ba'ray | an ox |
| bə'retay | a little ox |

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 qolçəmmay and qalčemay 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 fähmay and fähmetay, 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. ${ }^{1}$ 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 -ay
(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.

| çib | nits | çibay | a nit |
| :---: | :---: | :---: | :---: |
| haăšl | a jackal | ḥăšilay | a little jackal |
| foham | charcoal | fähmay | a large piece of charcoal |
| 'assit | a woman | 'assitay | 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 $-a y$ ) 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 § 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.r. 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.
nahab bees ful ground-nuts

With numerals the (singulative) forms used are nahbät 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. ${ }^{\text {. But }}$ 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 nəhab and the plural 'änhab, both of which can only be translated 'bees'. ${ }^{2}$ But in some cases there is a clear difference in meaning, as in:

| coll. waraq | paper | sing. wäräqät a piece of |  |
| :--- | :--- | :--- | :--- |
| pl. | wäräqotat | pieces of <br> 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.
$\begin{array}{llllll}\text { sing. } & \text { sämbu' } & \text { a lung } & \text { dim. } & \text { sämbu'ät a little lung } \\ \text { coll. } & \text { sämbu' } & \text { lung } & \text { sing. sämbu'ät a piece of lung }\end{array}$
Another example is bun 'coffee', which as a collective has the meaning 'coffee-beans' or 'coffee-bushes', with a singulative bunät,

[^25]but as a singulative bun has the meaning 'a cup, or glass, of coffee' ('a coffee'). We may compare:
\[

$$
\begin{array}{ll}
\text { kal'e bunät (not bun) } & \text { two coffee-beans/bushes } \\
k a l ' e ~ b u n ~ & \text { two coffees }
\end{array}
$$
\]

(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 -ät 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 numeralsworo/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:

$$
\text { gar affairs } \quad \text { garit } \quad \text { an affair }
$$

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

| čab ${ }^{\circ} t$ | finger |
| :--- | :--- |
| tülit | she-goat |
| korit | a ball |

But these can all be treated as singular forms with a final $t$, not the ${ }^{1}$ § 6.3.9.
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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. ${ }^{1}$ Though it is possible to treat some of these as having the suffix $-i t$, it would be less reasonable with others, e.g. korit, where the $i$ is clearly part of the radical formation (plural käwärri). But in no case is there any gain in simplicity - on the contrary, if - $i t$ is a suffix in the first two examples we shall require the new double suffix -ität in çabb'ität, ṭälität; 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.

| $\operatorname{gim}(\mathrm{f})$. | clouds | gimät | a cloud |
| :--- | :--- | :--- | :--- |
| fəham (m.) | charcoal | fähmät | a piece of charcoal |

We must place with these the forms with suffix -ät of the nouns which have no singular forms-the form with -ät being lexically quotable-e.g.
wo’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.

| çib | nits | c̣ibay | a nit |
| :--- | :--- | :--- | :--- |
| qonqon | weevils | q$\partial n q \partial n n a y ~$ | a weevil |

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

| ب̌a'e | acacia | と̌a'etay | a piece of acacia wood |
| :--- | :--- | :--- | :--- |
| waăgre | olive | wägretay | a piece of olive wood |

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

[^26](c) a class of nouns referring to joints of meat, where the suffixed form has the meaning 'a piece of . . 'r-e.g.
qolčam shin qolčammay a piece of shin
täda‘ 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.
\[

$$
\begin{array}{ll}
\text { ballay } & \text { a cloth } \\
\text { märday } & \text { a sharp point }
\end{array}
$$
\]

The suffixes -ät 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.

| muz | bananas | muzät | a banana |
| :--- | :--- | :--- | :--- |
| hämle | vegetables | hamletät | a vegetable |

(b) With nouns with singulars of the structure $\mathrm{CaCCa} C$, the final radical is geminated-e.g.

| qonqon | weevils | qonqənnay | a weevil |
| :--- | :--- | :--- | :--- |
| dagdag | land at higher | dagdaggät | a field at a higher |
|  | level |  | level |

We may compare the form of a noun with no singular:
tənkallät a plait
(c) If the singular form ends in $-a$, the suffix replaces (is not additive to) this vowel-e.g.

| šägla | figs | säglät | a fig |
| :--- | :--- | :--- | :--- |
| baldänga | beans | baldängät | a bean |

(d) The patterns $C a ̈ C C a ̈ C, C ə C C a ̈ C, C a ̈ C a ̈ C a ̈ t, ~ a n d ~ C ə C C a ̈-~$ Cät, involving a change of vowel, and, in the last case, gemination, ${ }^{\text { }} \mathrm{Cf}$. §6.3.1.
are regularly found with nouns whose singular form is of the type $C ə C ə C, C ə C a ̈ C, C ə C a C$, and $C a ̈ C a ̈ C$. The following related patterns were noted:

| (23) baläq | big rocks | bälqät | a big rock |
| :---: | :---: | :---: | :---: |
| (4) ğolab | dhows | ğälbät | a dhow |
| (9) tämär | dates | tämrät | a date |
| (21) madäd | grindstones | məddät | a grindstone |
| (1) 'abon | stones | 'əbbänät | a stone |
| (3) çagär | hair | çaggärät | a hair |
| (2) ğaban | coffee-pots | gäbänät | a coffee-pot |

The following have singulative forms of the same structures, but do not involve vocalic change (except the absence of $\partial$, which is conditioned by the syllabic structure).
(3) nohob
bees
nəhbät
a bee
(5) wärzq silver wärqät a piece of silver ${ }^{1}$
(e) Forms with the vowel $e$ were rare and confined to:
four nouns of the following pattern, all names of trees (unidentified): hälqa

## haälqetät

nouns with singular forms of the structure $C V C C V C$ with the vowel $a$ in the second syllable-e.g.
källat earthenware källetät a piece of earthen-
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:
fäles wood follasay 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

[^27]compared with -ät, and also to the suffix -etay as compared with -ay. ${ }^{\text {I }}$ 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 formthere 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.) | Singulative | Diminutive |  |
| :---: | :---: | :---: | :---: |
| (i) |  | karrenät | a little voice |
| (ii) | nahas (m.) a house | nahesay | a little house |
| (iii) (fohäm) | fähmät a piece of charcoal | fähmätit | a little piece of charcoal |
|  | wa'ät a cow | wa'ätit | a little cow |
| (iv) | $b{ }^{\text {'ray }}$ ray an ox | ba'retay | a little ox |

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

$$
\text { 'ädgat a she-donkey 'ädgotit a little she- } \begin{gathered}
\text { donkey }
\end{gathered}
$$

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

$$
{ }^{1} \text { Cf. § 6.2.r. } \quad{ }^{2} \text { Cf. §6.1.3. }
$$

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 -ay, and no unsuffixed singular form (the form with -ay 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 ba'ray, ba'retay-and the plural of tästay is tästot, the regular form for nouns with lexically quotable forms in -ay). ${ }^{\text {I }}$

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 | soray | a little load |
| 'ämur | a milk-pail | 'ämurät | a little milk-pail |
| bayhot | a jackal | bayhotät bayhotay | a little jackal |
| 'ade | $a$ hand | 'ədetät | a little hand |
| şollu | a squirrel | šllutay | a little squirrel |

${ }^{1}$ Cf. § 5.2.2.

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

dəmmu a cat $\quad$| dommätit 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 |
| :---: | :---: | :---: | :---: |
| 'วwan | a period of time | 'əwenät | a short period of time |
| karbağ | a whip | karbeğät | a little whip |
| ğəna | a child | ğmetät | a little girl |
|  |  | ğnetay | a little boy |
| mogda | a bonfire | magdetay | a little bonfire |

Some forms with the double suffix -ätit 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 $\partial$ as the vowel of the final syllable (which must be a closed ( $C V C$ ) syllable in view of the short vowels), the diminutive has the vowel $e$ and, where the singular is of the structure $C V C V C$, gemination of the second radical also-e.g.

| holağ | an anklet | halleğay | a little anklet |
| :--- | :--- | :--- | :--- |
| färäs (m.) | a horse | färresay | a little horse |
| (f.) | a mare | färresät | a little mare |
| masgad | a mosque | məgeday | 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.

| ‘ällos | a hawk | 'ällasät | a little hawk |
| :--- | :--- | :--- | :--- |
| 'ondar | a flute | 'mdərätit | a little flute |

There are a few examples of alternative forms:

| kämfär | a lip | kämferät $/$ <br> kämfärätit | a little lip |
| :--- | :--- | :--- | :--- |
| ‘ärqäb | a scorpion | 'ärqübät $/$ <br> ‘ärqebät | a small scorpion |

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

| gad | a cotton thread | gaddetay | a small cotton <br> thread |
| :--- | :--- | :--- | :--- |
| 'on | an eye | 'ontätit | a little eye |

But three forms were noted that are exceptional to the general pattern. The first has the stem structure $C V C$ - (not $C V C C$-) even in the suffixed form:
$t a b$ a breast tabetay a little breast

The second has the stem structure $C V C C$-, 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 $C V C V C$ singular forms, either of the last two radicals, is a laryngeal, the diminutive has the suffix -ätit or -etay-e.g.

| säf , | a winnowing tray | säf'etay | a little winnowing tray |
| :---: | :---: | :---: | :---: |
| $m{ }^{\prime}$ 'äs | a hide | ma'äsetay | a little hide |
| mohbr ${ }^{\text {a }}$ | a hiding place | mahba $\ddot{\text { ätit }}$ | a small hiding place |
| mäftoh | a key | mäftzhetay | a small key |

Where the laryngeal is ' and the previous vowel is $u$, the forms are: ${ }^{1}$

| bəggu | a sheep | baggə'utay | a little sheep |
| :---: | :---: | :---: | :---: |
| karku ${ }^{\text {b }}$ | a piece of ear- | karka'utat | a little piece of ear- |
|  | X |  | wax |

(d) The only forms with gemination and a change of vowel other than to $e$ that were noted are: ${ }^{2}$
$\left.\left.\begin{array}{llll}\text { soṭal } & \text { a curved dagger } & \text { soţllay } & \text { a small curved } \\ \text { dagger }\end{array}\right\} \begin{array}{ccc}\text { rošan } & \begin{array}{c}\text { a storied } \\ \text { building }\end{array} & \text { rošannätit }\end{array} \begin{array}{c}\text { a little storied } \\ \text { building }\end{array}\right\}$
(e) There were two examples in which the diminutive (semantically defined) differed from the singulative in having the vowel $e$ :
(qanqan) qanqannay a weevil qanqenay a little weevil (fäloṣ) follaṣay a piece of wood follesay 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 |$\quad$ 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 $-a y$ where the singulative has no suffix, but also to -etay where the singulative has the suffix -ät ${ }^{3}-\mathrm{e} . \mathrm{g}$.
'ənas (m.) a man 'ənesüt a weak man
(dim. 'ənesay)
${ }^{1}$ Cf. § 1.8.
${ }^{2}$ There is a similar diminutive plural-hesassat (hesas 'rancid butter').
${ }^{3}$ Cf. § 6.2.1. One form, sammetay, was noted though no singulative was recorded-the collective being sam 'poison'. A singulative *sammät can be 'reconstructed', though the double consonant is absent from the form with pronominal suffix, cf. § 7 (iv).

| nassal(m.) | a tongue | nasselät a <br> (dim. nasselay) |
| :--- | :--- | :---: |
| 'assit (f.) | a woman | 'assitay <br> (dim. 'assität) a bad woman |
| märwäd (f.) | a ring | märweday poor ring <br> (dim. märwedät) |
| täwlät | a table | täwletay a poor table <br> (dim. täwlätit) |

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.

```
mänka (f.) a spoon mänketay a poor spoon
    (dim. mänkätit)
```

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 $(\mathrm{m})$. <br> mämba (m.) | a neighbour | a master |
| :--- | :--- | :--- | :--- |$\quad$| goretay |
| :--- |
| mämbetay |$\quad$| a bad neighbour master |
| :--- |

(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.

| darfon | a ram | darfannay <br> dorfenay | a little ram ${ }^{\text {I }}$ |
| :--- | :--- | :--- | :--- |
| 'a poor ram |  |  |  |
|  | a puppy | 'onkarray | a little puppy |

[^28](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 <br> $(\mathrm{m} / \mathrm{f})$. | a nice little speech |
| :---: | :--- | :--- | :--- |
| mora | a stick | higetay | a poor speech |
| $(\mathrm{m} . / \mathrm{f})$. |  | morätit | a nice little stick |
|  | 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:
(karbit) karbität a match karbitay 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.

| (fəham) fähmät a piece of fähmay | a large piece of |
| :---: | :---: | :---: | :---: |
| charcoal |  |

It follows that the augmentatives are found only with nouns that have a singulative with the suffix -ät (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 -ät), or nouns with no unsuffixed singular form, but a lexically quotable form in -ät.

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:
qəmäl lice (sing.) qəmmälät a louse (aug.) qomällay a large louse

There is one form which is semantically but not formally an augmentative:
qolç̌วmmay a strong wrist

This would be formally an augmentative only if there were a singulative *qolçommät. But the other forms are: ${ }^{\text {r }}$

| (sing.) qolč̌m (f.) | a wrist |
| :--- | :--- |
| (pej.) qalçemay | a weak wrist |
| (dim.) qalçammätit | 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 $-a m$ 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 <br> camels |
| :--- | :--- | :--- | :--- |
| wa'ät (f.s.) | a cow | wa'at/wo'etat(f.p.) a few cows |  |
| kis (m.s.) | a pocket | kisetam (m.s.) | a few pockets |
| rošan (f.s.) | a storied <br> building | rošannetat (m.s.) | a few storied |
|  |  |  | 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

[^29]illustrated by kisetam and rošznetat above-diminutives kisay and rošznnätit. 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.
(garäh) gärhät a field gärhat a few fields
(ii) For the noun dommu alternative forms were noted as follows: (dim. dəmmätit) dommetat/dammutat a few (she-) cats
(dim. dommutay) dommetam/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 |
| :--- | :--- | :--- | :--- | :--- |
| (ğəna) | 'ă̌ännit | children | 'äfresam | a few horses |

For nouns whose third radical has the consonantal exponent of $y$ in the plural ${ }^{2}$ the vowel $e$ replaces the sequence aya-e.g.

| (näwid) | näwayəd | kids | näwedatl | a few kids |
| :--- | :--- | :--- | :---: | :--- |
| (gäzirät) | gäzayər | islands | näwedam |  |
|  | 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 $-a t-\mathrm{e} . \mathrm{g}$.


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 'onas '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.

| färäs (m.s.) a horse | 'äfresam | a few horses |
| :--- | :--- | :--- |
| färäs (f.s.) a mare | 'äfresat | a few mares |

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 section ${ }^{1}$ of the first of the following:

| ‘äqqäč | soldiers | ‘äqqäytay | a soldier |
| :--- | :--- | :--- | :--- |
| 'älläč | foreigners | ‘älläytay | a foreigner |

If we treat $\check{c}$ as morphologically equivalent to $y t$ these can be treated as collective and singulative respectively. But there are two points against this solution. First, ‘äqqäč and 'älläč 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:
šahär magicians šahartay a magician

Also attested, however, was the singular form šghor. Taken together with this šahär 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 šäqqaṭebay merchant
These forms are certainly singulatives. The forms with plural concord are:
dällal or dälalib agents, middle men säquqat merchants
Both nouns have alternative forms with singular concord-dällal (the same as that with plural) and säqqatay. The form dälalib is clearly a broken plural, but, while dällal and säqqat 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.

| mänsä́ | mänsa'ay | mänsa'ayt | Mensa Tigre speaker |
| :--- | :--- | :--- | :--- |
| 'ämhara | 'ämharay | 'ämharayt | Amharic speaker |
| balen | balenay | balenayt | Bilin speaker |
| häbäs | häbäšay | häbäs̈ayt | Tigrinya speaker |
| hämäsen | haämäsenay | häämäsenayt | Hamasien Tigrinya <br> 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:
šamagälle nobles šmagällay a noble
(vii) Some other nouns, mostly indicating nationality, have an

[^30]unsuffixed form with plural concord, and a form with the ending $-i$ that has singular concord-e.g.

| 'äskär | soldiers | 'äskäri | a soldier |
| :--- | :--- | :--- | :--- |
| tilan | Italians | tilani | 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 $\mathrm{Ca} \mathrm{CäC}$ which are collective, with a singulative with the suffix $-\ddot{t} t^{1}-$ e.g.

| zabäd | butter | zabdät | a piece of butter |
| :--- | :--- | :--- | :--- |
| domäq | skulls | dämqät | a skull |
| čgär | hair | c̈ggärät | a hair |
| 'วbär | needles | 'วbrät | 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. 'əbən, 'əbän 'stone', 'stones';
(b) one, at least, a form of an animate noun, has plural (and feminine) concord:
kawäk black snakes kukät (kzwkät) 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:

| ǧalab | dhows | ğälbät | a dhow |
| :--- | :--- | :--- | :--- |
| 'aday | debts | cäydät | a debt |
| ǧaban | coffee-pots | g̈äbänät | a coffee-pot |
| waraq | paper | wäräqqät | 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;

[^31](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. ${ }^{1}$ 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'. ${ }^{2}$ 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.

$$
\text { dagam } \quad \text { stories } \quad \text { dagma a story }
$$

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.
do'ul bulls hanti do $u$ uli one bulls
${ }^{1}$ Cf. Dillmann and Bezold, Ethiopic Grammar, 299 seq.
${ }^{2}$ Cf. 'Noun in Bilin', 385-7.
${ }^{3}$ Informant Mohamed Ali of Anagit.
${ }^{4}$ Agame dialect, informant from Adigrat.
${ }^{5}$ 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.

## 7

## 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. | $u$ | $o m$ |
| 3 fem. | $a$ | $\ddot{a} n$ |
| 2 masc. | $k a$ | $k a m$ |
| 2 fem. | $k i$ | $k \partial n$ |
| I masc./fem. | $y e$ | $n a$ |

The second masculine plural form kam 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. ${ }^{1}$

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 |
| :--- | :--- | :--- | :--- |
| fore | fruit | forehän | their (fem.) fruit |

(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:

| $t / c ̌$ | bet | house | bečče |
| :--- | :--- | :--- | :--- |
| $d / g$ walad | sons | walağğg house | my sons |

[^32]| $t / c$ | samot | side | samačưe | my side |
| :---: | :---: | :---: | :---: | :---: |
| $s / s$ | ro'as | head | ro’วš̌e | my head |
| z/2 | mah̆äz | river | mahäžže | my river |
| $s / c_{6}$ | fälos | piece of wood | fäloçče | my piece of wood |

(iii) As was noted in the phonological section, a final $c$ has the morphological function of $-y t$-. This is clear from
‘äqqäč $c^{1}$ soldiers ‘äqqäytu his soldiers
and from forms with plurals in the suffix - $\ddot{a} \check{c}^{2}$-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 $C V C$ with $V$ a short vowel are morphologically to be treated as $C V C C$. In most cases the last two (morphologically speaking) consonants are the same:

| sor | vein | sorru | his vein |
| :--- | :--- | :--- | :--- |
| gäd | luck | gäddu | his luck |
| qär | horn | qärru | his horn |
| cf. | som | a name; poison | samu |
| däm | blood | dämu name; his poison | 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.

| $g_{\partial n}$ | border | $g_{\partial n d u}$ | his border |
| :--- | :--- | :--- | :--- |
| 'mn | eye | ${ }_{\text {'antu }}$ | his eye |
| häl | maternal aunt | hältu | his maternal aunt |

There are similar features with a few non-monosyllabic singularse.g.

| wälät | daughter | wä̈lättu | his daughter |
| :--- | :--- | :--- | :--- |
| nə äl | sister-in-law | nə älta | her sister-in-law |
| karən | voice | karantu | his voice |

All the forms with an additional $-t$ - are feminine, and in one ${ }^{1}$ Cf. §§ r .3 (iv) and 6.3 .9 (i).
${ }^{2}$ §5.2.1.
${ }^{3}$ Not *qärnu, cf. §§ 6.3.3 (p. 56) and 4.2.1 (vi).
${ }^{4}$ In spite of 'äsmay (\$ 4.2.2) and sammetay (§ 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):

$$
\begin{aligned}
& \text { báäl (m.f.) owner bäälu(m.) his (male) owner } \\
& \text { báältu (f.) his (female) owner }
\end{aligned}
$$

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.

| 'on eye | 'onče | my eye |
| :--- | :--- | :--- |
| wälät daughter | wäläčče | my daughter |

A rather different feature is the occurrence of $-t$ - with the feminine plural suffix -än, with a few broken plurals of the pattern 'äCCəC (class I)-e.g.

| $(b a ' \partial s)$ | 'äb'as husbands | 'äb'astän | their husbands |
| :--- | :--- | :--- | :--- |
| $(r \partial ’ a s)$ | 'är'əs heads | 'är'astän | their heads |

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

| 'äf | mouth | 'äfuye | my mouth |
| :--- | :--- | :--- | :--- |
| 'äb | father | 'äbuka | your father |
| häm | father-in-law | hä̈muhu | his father-in-law |

(vi) The noun wäd has the stem wäl- with all suffixes that do not begin with a vowel, but wädd- (as sar, \&c., above) for those that begin with a vowel: ${ }^{1}$

| wäd son | wälye my son <br> wälka your son <br>  wäddu <br>  his son |
| :--- | :--- | :--- |

[^33](vii) The clusters $-g k$ - and $-q k$ - are possible at this stem-ending juncture only-e.g.

| hog | elbow | hogka | your elbow |
| :--- | :--- | :--- | :--- |
| suq | shop | suqka | your shop |

But while $-g k$ - may often have no voicing (and could thus be written $-k k$ ), the ejection of $-q k$ - is always phonetically present in glottal closure.
(viii) The cluster -yy-(not gemination) is also possible only at this type of juncture-e.g.


## 8

## 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 $\mathrm{CäCiC}$, a feminine singular $C a ̈ C C a C$, 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 gäzayaf thick

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

$$
\text { (1) ‘äbi ‘äbbay } \quad \text { ‘äbayi } \quad \text { big }
$$

With the same plural form, but a feminine with the suffix -ät, is:
(2) wäğib wäğibät wäğayab fertile

This is also the pattern of two adjectives with a masculine singular CäCuC:
(2) gädud gädudät gädayzd 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 $(\mathrm{CäCäCCaC})$ was noted
for a few adjectives with a masculine singular $C V C C V C$. The feminine singular has the suffix -ät or -it-e.g.

| (2) hänkiš | hänkišät | hänäkkaš | with a limp |
| :--- | :--- | :--- | :--- |
| (1) gandab | gondabit | gänäddab | old |
| (1) dogläl | daglälit | dägällab | 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 |  | färad |  | 'äfrad | odd, single |
| III |  | fänäk |  | 'äfnak | brave |
| XI | fädab |  | fädabit | fädayab | brave |
| XII | häzvan |  | häzvanit | häwawin | unfertile |
| XIV |  | hamrarib |  | hämärrab | heroic |
| XVI |  | sä́da |  | ss'adi | white |
| XVII | qayzh |  | qäyah | qäyhit | red |
| XVII | samu ${ }^{\text {c }}$ |  | son'at | sän'it | noble |
| XVIII |  |  | 'ämsat | ‘ämässi | pregnant |

### 8.2. Adjectives with suffixed plurals

Most of the adjectives that have suffixed plurals are morphologically verbal formations-participles. The plural suffixes are $-y a m$ (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 $\partial$ or no vowel (according to syllabic structure) in place of $u$ e.g.

| (1) hud | hadot | hudam | hudat | few |
| :---: | :--- | :--- | :--- | :--- |
| (I8) kabud | kabdat | kabudam | kabudat | heavy |
| (6) dongur | dongarat | danguram | dongurat | slow |

(b) Others have no suffix in the feminine form, but still a in place of $u$-e.g.
(4) 'วwur 'awar 'awuram 'awurat blind
(I) garrum garram garrumam garrumat beautiful
(c) Where a laryngeal is the final radical, the vowel $u$ does not occur in any of the suffixed forms-e.g.
(7) bazuh bazhat bazham bazhat many
(d) Where the final radical is $y$, the feminine form has the ending $-i t(=-y a t$ or $-z y a t)-$ e.g.

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

$$
n a^{\prime} u s ̌ \quad n a ’ \partial s ̌ \quad n \partial ’ a y \partial s ̌ \quad \text { small }
$$

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) kabud | kabdat | käbayad | heavy |
| :--- | :--- | :--- | :--- |
| (3) ṣagub | şagbat | ṣäggab | 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 qätla 'he killed':

| qotul | Passive | tqättäla |
| :--- | :--- | :--- |
| 'aqtul | Causative | 'äqäla |
| 'ottoqtul | Double Causative | 'ättäqtäla |
| qutul | Reciprocal | tqatäla |
| 'atqutul | Causative Reciprocal | 'ätqatäla |
| qotutul | Frequentative Active | qätatäla |
| 'otqotutul | Frequentative Passive | trequentative Causative |

(ii) Adjectives with a masculine singular form of the structure $C a C a C$ have plural forms with the same suffixes, but feminine singular forms with the suffix -ät-e.g.

> (1I) hamaq hamqät 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) hayas haysät
haysotat
noble
(iii) Most adjectives with stem-final syllable $C a C$ have the suffixes -it, -yam, and -yat. Many of these adjectives refer to personal physical characteristics-e.g.
(9) ب̆äggar čäggarit čäggaryam ẹäggaryat 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 qüdamyam qüdamyat first
Where the final radical is $y$ only a single $y$ is found in the plural ${ }^{1}$ e.g.
(1) ganay gənayit gznayam ganayat ugly
(1) 'äbay 'äbayit 'äbayam 'äbayat hostile
(iv) Idiosyncratic patterns were noted for:

| sänni sännet | sänyam sänyat | good |
| :---: | :---: | :---: |
| tala | talitat | 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:

| no'us' | no'ušay | nə'əš | nə’วธ̆ät | small |
| :---: | :---: | :---: | :---: | :---: |
| dabur | doburay | dobrot | dobratit | poor |
| hud | huday | hadat | hadatit | few |
| şruy | ssaruyay | sarit | sarität | clean |
| qarub | qarubay | qarbat | qarbatit | near |

The masculine form of the diminutive has the suffix -ay, the feminine -ät, or when preceded by the suffix -at, the suffix -it. ${ }^{2}$

One masculine diminutive form was noted that has either the suffix -etay or the very rare ending -ebay. ${ }^{3}$ mäkruh mäkrəhetay/mäkrohebay evil

[^34]
## 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 § r.r.
(iii) After each headword an indication is given whether it is collective or singulative, and, if singulative, of its gender by the abbreviations $\mathbf{c}$. (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 bs'ray and čamçay 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
hau m.s., brother, pl. häw.

[^35]$t a b$ m.s., breast, pl. 'ätbay, d. tabetay.
sam m.s., name, pl. 'äsmay.
sam c., poison, p. sommetay.
$\operatorname{sor}(r)$ m.s., vein, pl. 'äsrar, d. sorretay.
$s a q(q)$ m.s. provisions, d. saqqetay.
$\mathrm{CaC-}$-(cont.)
ğən(n) m.s., demon, pl . 'äğnan.
gab(b) m.s., small cave, pl. 'ägbab,
d. gabbetay.
$\operatorname{gad}(d)$ m.s., cotton thread, pl. 'ägdad, d. gaddetay.
gən(d) m.s., border, pl. 'ägnad.
'am(m) f.s., mother, pl. 'ammat.
'mn(t) f.s., eye, pl. 'ontat, d. 'ontätit.
hot f.s., sister, pl. häwat.
rah|'ärwahät f.s., soul, pl. 'ärwahat.
woš(š) f.s., cartridge, pl. 'äwšaš, d.p. 'äwšešat.

CaCät ${ }^{\text { }}$
bo'ät, cave, pl. ba'ätat/bo'otat, d. ba'ätit, p. ba'etay a. ba'ay.
sa‘ät, watch, pl. sa'otat, d. sa'ätit, p. sa'etay, a. sa'ay.
$n \partial ' a ̈ t$, female camel, pl. 'ansa, d. na'ätit, p. na'etay, a. na'ay.
wa'ät, cow, pl. 'äha, d. wa'ätit, p. wa'etay, a. wa'ay, d.p. wa'at/ wa'etat.
$C a ̈ C$
sär(r) m.s., half, pl. 'äsrar.
sär(r) m.s., misfortune, pl. 'äšrar/ šärotat.
gäş(s) m.s., face, pl. 'ägasşät, d. gässetay (thin, pale, face).
$g \not \ddot{a}^{\prime}$ m.s., black lizard, pl. 'äg'at/ 'äg'atat.
qäs c., fleas, s. qesay.
$q a ̈ s(\xi)$ m.s., priest, pl. 'äqəšs̈ät, d. qäşetay.
qär(r) m.s., horn, pl. 'äqวrnät, d. qärretay.
'äf( $u$ ) m.s., mouth, pl. 'äfäč.
'äb(u) m.s., father, paternal uncle, pl. 'äbäč ('äbäw, forefathers).
häm(u) m.s., tatner-1n-1aw, pl. hämäč.
häl(t) f.s., maternal aunt, pl. hältotat.
‘äd(d) m.s., country, pl. 'äddotat, d. ‘äddetay.
wäd d d)(wäl-) m.s., son, pl. walad, 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. täleyay.
käray, hyena, pl. käräč (but also under $C a ̈ C a C)$.

## CäCCät

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

## CiC

sib, c., white hair, s. sibät.
čib c., nits, s. čibay.
kis m.s., bag, pl. 'äkyas, d. kisay, d.p. kisetam.
$\operatorname{gim} \mathrm{c}$. (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. anyeoat, p.p. 'änyebam.
${ }^{1}$ All have a medial laryngeal, and are thus of the same pattern as the CäCät forms.

CaC
bet f.s., house, pl. 'äbyat, d. fas m.s., axe, pl. fasat, d. fesay. betätit, p. betay, d.p. betat/ farm.s., smallmilk-jug, pl.farat, d. '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.
$t$ tut m.s., dry sinew, pl. 'ätwat.
suq m.s., shop, pl. 'äswaqat, d. (p.?) suqetay, d.p. suqetam.
$z u$ c., talk, pl. 'äzwa'at, s. za'ät.
šum m.s., leader, pl. šäyäm.
mиz c., bananas, s. muzät, d. muzätit.
ruz c., rice, pl. 'ärwaz, d. ruzät.
luh m.s., plank, pl. 'älwohat, d. luhay.
lul c., pearls, s. lulät.

## CuCät

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

## CoC

dol f.s., time, d. dolätit.
sol m.s., pad for load of head, pl. sazväl/'äsawlät.
şor m.s., load, pl. 'äswar, d. șoray.
kor m.s., pack saddle, pl. 'äkwar.
gos m.s., side, face (of wall, \&c.), pl. 'ägwas/'ägzasat.
gor m.s., neighbour, pl. 'ägzar, d. (p. ?) goretay.
qor m.s., depth, pl. 'äqwar.
hog m.s., elbow, pl. hawag.
hol m.s., year, pl. hawval.

## CoCät

soqät, thorn, pl. 'äšwaq. qogät, kind of tree, qäwäggi.
feray.
fal m.s., omen, pl. falat, d. felay (unfulfilled omen).
$b a b$ 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. tafätit.
šaš m.s., turban, pl. šasat.
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.
mas m.s., stick for cleaning teeth, pl. masat.
maq m.s., cloth, pl. maqat.
malm.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. waṭot, d. waṭetay/wateyay, d.p. watetam.

## CaCV

fare c., fruit, corn, pl. faryat, s. faretät, d. faretätit.
dəhe m.s., sound, pl. 'ädhuy.

CaCV-(cont.)
ça’e c., acacia, pl. ça`etat, s. čáetät (tree)/ča'etay (wood).
mase m.s., evening, pl. 'ämsuy.
lahe f.s., molar, pl. 'älhay, d. lahetät.
'ade f.s., hand, pl. 'adäy, d. 'ədetät.

## $\mathrm{CəCo}$

kabo c., dried dung, s. kabotät.
qalo c., roast corn, s. qalotät.

## CaCa

saga c., meat, pl. ’äsgay, s. sagät, d. sagätit.
dәma c., baobab, s. dəmät.
ǧana m./f.s., child, pl. 'äğännit, d. ğanetät/ğənetay, d.p. ğənetam/ 'äğännitam.

CäCV( $)$
zäma m.s., brother-in-law, pl. 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 häzwäggi, d. hägotay.
ṭälit f.s., she-goat, pl. 'aṭal, d. ṭalität, d.p. 'aṭelat.

## $\operatorname{CiCV}(t)$


qišot f.s., country village, pl. qäwuäši, d. qisotät.
higa m./f.s., speech, pl. hägäggi, d. higätit/(p. ?) higetay.

## $\operatorname{CeCV}(t)$

$q e t ̧$, f.s., arm-chair, pl. qäwätti, d. qețotät.
'edo m.s., skin cushion, pl. 'äzäddi.
'ela f.s., well, pl. 'äwälli, d. 'elätit.
'eṣat f.s., back, pl. ‘äwäş̣i.

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.

## $\mathrm{CaCə} \mathrm{C}$

fatah m.s., justice, pl. 'äftahat.
fadag/fataq f.s., small creek, pl. 'äfdug/'äftuq.
faram m.s., charcoal kiln, pl.'äfram/ 'äfərmät.
falaq m.s., pole supporting roof, pl. 'äfluq, d. folleqay/folqay.
baqal m.s., shoot (of seed), pl. 'äbqal (plants).
bo'as m.s., husband, pl. 'äb'as.
barak f.s., knee, pl. 'äbrak.
bara' m.s., pen, pl. 'äbra'at.
daraṣ m.s., belly, pl. 'ädrus.
samat m.s., side, pl. 'äsmaṭ.
sa'əd m.s., strong arm, 'äs'ud.
salaf f.s., husband's brother's wife, pl. 'äslaf.
salak m.s., wire, pl. 'äslak.
saməd m.s., door-post, pair of oxen, pl. 'äsmad.
safar m.s., finger-nail, pl. 'äsfar.
šaboh c., fat, s. šabhät.
šafar c., manure, s. safrät.
šakam m.s., hoof, pl. 'äskum.
šaqal m.s., work, 'äšqal.
šahar/šahartay m.s., evil magician, pl. šahär.
šaram m.s., rain-water pond, pl. 'äs̆ramat.
$\mathrm{CaCaC-(cont)}$.
ğənəs m.s., kind, pl. 'äǧnas.
çahəm m.s., jaw, pl. 'äçham/'äçhum. karan f.s., voice, pl. 'äkran/'äkrun,
d. karrenät, d.p. 'äkrenat.
kətam f.s., stamp, seal, pl. 'äktam.
gadab m.s., wood-axe, pl. 'ägdub.
gama' m.s., huge boulder, pl. 'ägämma'วt/'ägamma'ät.
galab f.s., cliff, pl. 'äglab.
$q a t a b \mathrm{~m} . \mathrm{s} ., \mathrm{leg}$ of bed, pl. 'äqtub.
qวšon m.s., branch, pl. 'äq̧̌un, d. qaš̌enay.
qəma' m.s., filter, pl. 'äqmə'at, d. qәтme'ay.
qarad m.s., root, pl. 'äqrud.
matad m.s., stake, pl. 'ämtud.
madar m.s., land, pl. 'ämdar/ 'ämdarat.
$m a^{\prime} \partial l$ (or 'äm'al) f.s., day, pl. 'äm'alotat, d.p.'äm'elat.
molaç f.s., herd of goats, pl. 'ämlač.
nəhab f.c., bees, pl. 'änhab, s. nahbät, d. nahbätit, d.p. nahbetat/ 'änhebat.
nahos m.s., house, pl. 'anhas, d. nohesay, d.p. 'änhesam.
'วbən f.c., stone, pl. 'วbän, s. 'əbbänät, d. 'abbänätit, d.p. 'abbänat.
'วzan f.s., ear, pl. 'วะän.
'azan f.s., section of tribe, pl. 'azan.
'əkal c., corn, pl. 'akal, s. 'əklät.
'agar f.s., foot, pl. 'əgär.
hamas m.s., bottom of belly, pl. hamas.
hafon f.s., double handful, pl. hafan, d. haffenät.
habot f.s., armpit, pl. habaṭ. habar m.s., colour, pl. habar.
$h a z a b$ m.s., people, pl. $h a z a b$, d. hazzebay.
haqəf f.s., bosom, pl. haqaf.
halam m.s., dream, pl. halam.
h.olag m.s., anklet, pl. halağ, d. halleğay.
'ador m.s., sickness, pl. 'adar.
'วṭbb c., cotton, pl. 'aṭab, s. 'əṭbät, d.p. 'atbat.
'asar m.s., gum (of teeth), pl. 'asar.
‘aqəb m.s., leg, pl. ‘aqab.
'amor m.s., life, pl. 'amar.
'วlab m.s., number, pl. 'alab.
'alağ m.s., child, 'kid', pl. 'aluğ.
rohom m.s., belly, pl. 'ärham.
laqab m.s., small cave, pl. 'älqub.
lahas c., bark for making rope, s. lahṣät.
wahar m.s., bull, pl. 'äwharät, d.p. 'äwharetam.

## CəCCät

kardät, kind of tree, pl. 'äkrud.
CaCCay ${ }^{1}$
ba'ray, ox, pl. 'äb'arät, d. ba'retay, 'äb'aretam.
ballay, cloth, pl. bälällit, d. balletay.

## Cə $C a ̈ C$

fəhäm c., charcoal, s. fähmät, d. fähmätit, p. fähmetay, a. fähmay.
faräzu c., fleece, s. färwät. baqäš c., luggage, s. bäqsät. bəhär f.s., pl. 'äbhar, d. bährätit. baläq c., big rocks, s. bälqät . təkäk c., bracelets, s. takkät. dobäb c., tilth, s. däbbät.
$d a b a ̈ \quad$ c., forest, s. däb‘ät, d. däb'ätit.
domäq c., skulls, s. dämqät.
damän c., abandoned buildings, s. dəmnät.
doläl c., umbrellas, s. dällät.
dahäb c., gold, pl. 'ädhub, s. dähbät, d. dähbätit.
safär c., tables, pl. säfrotat, s. säfrät, d. säfrätit.
sokäk, train lines, s. səkkät.
sonä‘ c., science, s. sän'ät.
sarär c., sparks, s. särrät.
${ }^{1}$ For others with the ending -ay see under CaCCaC . Only those in which -ay must be regarded as the suffix are given here.

CaCaC -(cont.)
sa‘är c., grass, pl. 'äs'ər, s. sä'rät, d. sä'rätit, p.p. sa'äretam.
zəbäd c., butter, s. zabdät.
šfäf c., blankets, s. šäffät.
šamäm c., black woollen blankets, s. šammät.
šanät c., haversacks, s. צänṭät.
šläg c., handfuls, s. sälgät.
ğəräd c., straight daggers, s. ğärdät.
çagär c., hair, pl. 'äčgur, s. c̣aggärät, d. č̣aggärätit.
çəqqäm c., fistfuls, s. ç̌əqmät, d. čaqmätit.
gahär c., charcoal, s. gährät, d. gährätit.
ganäb c., pads put under saddle, s. gämbät.
garäh c., fields, s. gärhät, d. gärhätit, p. gärhetay, a. gärhay, d.p. gärhat.
katäf c., muscle, s. katfät, d. katfätit.
karäs c., stomachs, s. kärs̈ät, d. kärsätit.
kəyäm c., tents, s. käymät, d. kaymätit.
kawäk c. (f.p.), black snakes, s. kukät (kawkät), d. kukätit.
qədäd c., growth on body, s. qəddät.
$q \partial t a ̈ b$ c., thorn trees, s. qaṭbät.
qamäl c., lice, s. qammälät, d. qəmmälätit, a. qəmällay.
qaläw c., coloured matting, s. qalwüt.
qәwä' m.s., crane, pl. 'äqaw'ät.
madäd c., grindstones, s. maddät.
ma'äs m.s., hide, pl. 'äm'əs, d. ma'äsetay, d.p. ma'äsetam/'äm'esam.
məhäg m.s., hot fire, pl. 'ämhag.
nəhär m.s., chest, pl. 'änhur/'änhar.
$n{ }^{\circ} \check{a} l(t)$ f.s., sister-in-law of woman, pl. na'ältotat.
'วtäm c., springs, s. 'atmät, d. 'atmätit.
'əbär c., needles, pl. 'äbärri, s. 'abrät.
habbäz c., bread, s. habbäzät.
hagär c., red ointment of clay, s. hagrät, d. hagrätit.
haräb c., jute curtains, s. harbät.
horäṣ f.s., stick, pole, pl. harus, d. haresät, d.d. haresätit.
haläq c., metal hair bands, s. halqät.
həwäy c., camel-saddles, s. häwyät.
'วc̣äy c., wood, trees, s. 'açyät/, 'ačyay (tree/piece of wood), d . ‘วִ̆yätit.
'ayäb c., sacks, s. 'ibät ('aybät), pl. 'ayab.
'วyär c., insults, s. 'irät ('əyrät).
rakäb c., water-bottles, s. rakbät, d. rokbätit.
rašäm c., mountain tops, s. rašmät.
raqäy c., curved sticks, s. raqyät.
ra'äs m.s., head, pl. 'är'as, d. ro'äsetay.

## CəCäCät

məḥäṭät, railway station, pl. mohaätotat.
lahäbät, sweat, pl. lahäbotat.

## CaCaC

faraš f.s., mattress, pl. 'äfaršät.
ba'al m.s., festival, pl. ba'alat.
takan c., red bugs, s. takenay.
takay m.s., pole of house, pl. takyat.
dərar m.s., supper, pl. 'ädarrät, d. dareray.
safal m.s., pipe for carrying flour in mill, pl. 'äsaflät.
sagad (or səgad) m.s., neck, pl. 'äsagdät.
sarak m.s., sandal strap, pl. 'äsorkät.
saray m.s., medicine, pl. 'äsaryät.
solam m.s., bullock's hump, pl. 'äsalmät.
zəfan m.s., throne, pl. zəfanat.
zalam f.s., rain, pl. zälayzm.
ṣalal f.s., shadow, image, pl. 'äşollät.
səwar m.s., arms, pl. 'äsowrät.
šaqaq m.s., lavatory, pl. 'äšaqqät.

CaCaC-(cont.)
ğaban c., coffee-pots, pl. ğäbänotat, s. ğäbänät, d. ğäbänätit, p. ğäbänetay, d.p. ğäbänetat.
ğalab c., dhows, s. ğälbät, d. gälbätit.
katab m.s., book, pl. 'äkatbät, d. katebay.
karar m.s., window curtain, pl. 'äkarrät.
kalal m.s., wooden hair comb, pl. 'äkallät.
garab m.s., thing, pl. 'ägarbät, d. garebay.
garan m.s., bracelet, pl. 'ägarnät, d. garenay.
$q a r a b$ c., skin, s. qärbät, d. qärbätit.
mohaz m.s., river bed, pl. məḥazat, d. mohezay/mohazetay.
naway m.s., herd of cattle, pl. 'änawyät.
'əsat f.s., fire, pl. 'asatat, d. 'asetät, d.d. 'asetätit.
'agal m./f.s., calf, pl. 'əgəl, d. 'əgelät/ 'agelay, d.p. 'ggelat/'agelam.
'ənas m.s., man, pl. säb, d. 'ənesay/ 'anasetay, p. 'ənesät, d.p. säbetam, p.p. säbetat.
'วwan f.s., time, d. 'awenät, d.d. 'awenätit.
haşan m.s., boy, d. hoṣenay.
halay c., poems, s. halayät, d. haleyät/holayätit.
hawar m./f.s., small foal, pl. haäwrät, d. hawerät/haweray, d.p. hawerat/ haweram.
'adal c., celebrations, s. ‘ädlät.
'วday c., debts, s. ‘äydät.
'azal m.s., shade, pl. ‘äzallät.
rasas m.s., pencil, pl. 'ärassät, d. rasesay.
rokab m.s., stirrup, pl. 'ärakbät, d. rakebay.
rayal m.s., dollar, pl. 'äraylat.
laban c., incense, s. labanät/labenät, d. labenätit.
waraq c., paper, pl. wäräqotat, s. wäräqät, d. wäräqätit, d.p. wäräqetat.

## CəCaCät

tayarät, aeroplane, pl. tayarat. sagadät, ascent, pl. sägayad.
šagarät, cigarette, pl. šägayar, d. šagarätit, p. šagaretay, d.p. šagaretat.
ganazät, corpse, pl. gänayaz.

## CaCiC

falit f.s., calf, pl. fälayat, ${ }^{\mathrm{T}}$ d. falität, d.d. fəlitätit, d.p. faletat.
towit f.s., cartridge, pl. țäwawit, d. țavität, d.p.t.tawitat.
ša'ir c., barley, pl. ša'ayar, s. ša'irät, d. ša'irätit.
halil m.s., dry river bed, pl. hälayal. wahiz m.s., stream, pl. wahayaz, d. wahizay.

## CaCeC

ba'er, m.s., half-grown camel, d.

fadel m.s., letter, d. fodelay.
satet f.s., rib, pl. säytat.
ğznen f.s., garden, pl. ğänayan/ ǧanenotat, d. ğanenät, d.d. ğanenätit.
garet m.s., Muslim woman's silver ornament, pl. gärayat.
qaren m.s., state, government, pl. qarenat.

## Cə Cu C

foluy m.s., calf, pl. fälayit, d. faluyay, d.p. faluyam.
qaruš m.s., money, pl. 'äqruš.
nagus m.s., emperor, pl. näggäs.
hadud m.s., boundary, pl. hädayad.
'aquq m.s., flat field in valley, pl. ‘äqayaq.

## CaCoC

basot f.s., forehead, pl. bäswat.
qaror m.s., glass, pl. qärawar, d. qarorät.
nagot f.s., elephant's trunk, pl. nägzat.
'ggot f.s., small earthenware cup, pl. ‘ägwat.
'aqot f.s., rope for tying animals, pl. 'äqwat.
'วyot m.f.s., lamb, pl. 'ayut/'äywat/ 'äwyat, d.p. 'ayutam.

CäョCC
fätol m.s., thread, pl. 'äfättal.
färod m.s., revolver, pl. 'äfrud, d. färreday.
fälas c., wood, s. fallaṣay, d. falleṣay/ fallasetay.
bäsah m.s., young man, pl. 'äbashat.
täda' m.s., centre of breast-bone, pl. 'ätädda'at/'ätadda'ät, s. ('piece of . . .') täd' $e t a y$.
tärəf m.s., child, son, pl. 'ätraf.
däbar m.s., mountain, pl. 'ädbar, d. däbberay.
țäbal m.s., drum, pl. 'äṭbal.
säfg' m.s., winnowing tray, pl. 'äsäffa'ət/'äsaffa'ät, d. säf'etay, d.p. säf'etam.
säyaf m.s., sword, pl. 'äsäyaf, d, säyefay.
zära' m.s., seed, pl. 'äzärra'ət.
ṣäbəh m.s., lunch, pl. 'äṣäbbahat/ 'äşabbahät.
ṣäfar m.s., hide rope for loading donkey, pl. 'äsfar.
ṣära' m.s., teat, pl. 'äṣärra'at/'äṣarm ra‘ät.
ṣäla c., infected wounds, pl. 'äṣälla'at|'äṣalla'ät, s. şäl'ät.
çäfa' c., dung, pl. 'äcäffa'at, s. c̣äf‘ät, d. čäffätit, p. c̣äf'etay, d.p. ẹ̆af'at.

گära' m.s., diarrhoea, pl. 'äsärra'ət.
צärr' m.s., stones for retaining soil, pl. 'äSärra'at.
B. 9948
käbad f.s., belly, pl. 'äkbud/'äkbad, d. käbbedät.
kälab m.s., dog, f. kälbät, pl. 'äklub, d. kälbätit/källebay, d.p. 'äklebat/ 'äklebam.
käyas m.s., python, pl. 'äkäyas, d. käyesay,/käysetay.
gäbar m.s., male slave, pl. 'ägbar, d.p. 'ägberam.
$q a ̈ b \partial r ~ \mathrm{~m} . \mathrm{s} .$, tomb, pl. 'äqbar, d. qäbberay.
$q a ̈ d \partial r$ c., small flying insects, s. qädray.
$q a ̈ d \partial h \mathrm{~m} . \mathrm{s} .$, pot for dipping water, pl. 'äqäddahat.
qäləb m.s., wish, pl. 'äqlub.
qäyad m.s., hobbling rope, pl. 'äqäyad.
$q a ̈ y a^{‘} \mathrm{~m} . \mathrm{s} .$, vomit, pl . 'äqวy'ät.
näfas f.s., soul, pl. 'änfas.
märgg c., earthenware, s. märgät.
'ädag m.s., donkey, f. 'ädgət, pl. 'ädug, d. 'ädgatit|'äddegay, d.p. 'äddegat/'äddegam.
'älaf m.s., thousand, pl. 'alaf.
häbal m.s., rope, pl. habal.
härrab m.s., water skin, pl. härrabat, d. härrebay.
hära' m.s., dung, pl. härro'ət.
'äwal m.s., cost, pl. 'awal, d. ‘äzelay.
wädd' c. shells, pl. 'äwädda', s. wäd'ät.
wäkad f.s., time, pl. 'äwkad, d. wäkkedät.
wärraq c., silver, pl. 'äwärraq, s. wärqät, p. wärreqay.
zürroh m.s., moon, month, pl. 'äwärrahat.

## CäCCät

țäblät, lock, pl. ṭäblotat.
țäzulät, table, pl. țäzlotat/ṭäwälli, d. țäwlätit, p. ṭäwletay.
s̈änkät, side, pl. 'äs̆nuk.
gäbhät, forehead, pl. gäbhotat.
'ägnät, nomad's hut, pl. 'ägnotat.
‘ärṣät, termite, d. ‘ärṛätit, a. ‘ärșay.

CäCCät-(cont.)
lähmät, skin on boiled milk, pl. lähayam/lähmotat.

CäCCay
tästay, bull, pl. tästot, d. tästeyay, d.p. tästeyam.
märday, point, pl. märäddit, d. märdetay.
härmay, robber, pl. härmäc/härmät.

## CäCäC

färäs m.|f.s., horse, pl.'äfräs''äfrus, d. färresät/färresay, d.p. 'äfresat | 'äfresam.
färä m.s., branch of family, pl. 'äfärr‘’t, d. fär' etay, d.p. fär'etam.
bädän m.s., animal corpse, pl. 'äbäddon.
bäsäl c., onions, s. bäslät.
bäräd m.s., hail, pl. 'äbärrod.
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.
sägän f.s., ostrich, pl. 'äsgan|'äsgun.
zäbän m.s., century, pl. 'äzbon/ 'äzbun, d. zäbbenäy, d.p. zäbbenam.
zänäb m.s., tail, pl. 'äzännəb, d. zännebay.
sägäm m.s., struggle, pl. 'äsgum.
sämär m.s., penis, pl. 'äšmur.
šäkäm m.s., beard, pl. 'äšäkkam/ 'äškum, d. šäkkemay.
ğääär m.s., side, pl. 'äğfur''aǧfar.
ğăbäl m.s., dewlap, pl. 'äğbal, d. g̈äbbelay.
ب̣äbäl c., ashes, d.p. ̣̣äblat.
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. 'ägäddar.
gämäl m.s., male camel, pl. 'ägmal, d. gämmelay, d.p. gämmelam.
gäläb f.s., spear, pl. 'äglub|'ägällab, d. gällebät.
qütäf c., leaves, pl. 'äqättof, s. qätfät, d. qätfätit, d.p. qätfat.
qäčäč $\mathrm{m} . \mathrm{s} .$, sweepings, pl. äqäččaç.
qäräf c., bark, s. qärfät.
qäräs c., kind of tree, s. qärşät/ qärsay (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. hämmĕ̆ay.
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.
haäyät m.s., lion, pl. hayut, d. häyetay, d.p. hayutam.
‘ädäd m.s., limit, pl. 'adud.
‘äg̈äm c., ivory, s. ‘äğgemät.
‘äräd m.s., neck, pl. 'arud, d. ‘ärreday.
‘äräm m.s., untreated skin, pl. ‘arum.
rämäç c., embers, d.p. rämĕăt.
lăs̈äm c., kind of bush, s. läs̈mät.
wädäg m.s., small dry riverbed, pl. 'äzö̈ddag, d. wäddegay.
wätär m.s., heroic song, pl. 'äwättar, d. wätteray.
wänän m.s., wild animal, pl. 'äwän$n \not n$.

CäCäCät
mäsärät, foundation, pl. mäsärotat.

## CäCaC

tänan m.s., smoke, pl. 'ätannät, d. tänenay.
tälal m.s., ear-ring, pl. 'ätallät.
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. härremät.
wärat m.s., job, pl. wäratat.

## CäCiC

näwid m.s., kid, pl. näwayad, f. näwidät, d. näzviday/näwidätit, d.p. näwedam/näwedat.
s̈ärit m.s., string, pl. särayaṭ, d. säriṭay.
šäbiq m.s., beestings, pl. säbayaq.
gäbil c., tribes, pl. gäbayal/gäbilotat, s. gäbilät, d. gäbilätit.
gäšiš m.s., maize cake, pl. gäšayaš.
qämis m.s., shirt, pl. qämayaš.
haäsin m.s., iron, pl. häsayon, d. häṣinay, d.p. häsinetam (häsinät quality of iron).
häšil m.s., jackal, pl. häs̆ayal, d. häšilay, d.p. häžilam/häšiletam.
hälib m.s. (?), milk, pl. hälayab.
härič m.s., flour, pl. härayaç, d.p. häriç̣at.
härim m.s., man of leisure, pl. härayam.
‘äğin m.s., dough, pl. ‘äğayon, d. 'äǧinay.
yätim m./f.s., orphan, pl. yätayam, d. yätimay / yätimetay / yätimät, d.p. yätimetam/yätimetat.

## CäCiCät

däkilät, request, pl. däkayal.
gäzirät, island, pl. gäzayar, d. gäzirätit, d.p. gäzerat, p.p. gäzeram.
‘äšinät, bag, pl. ‘äšayon.

## $\mathrm{CäCeC}$

šävet m./f.s., ear of corn, pl. s̆äwyat, d. ̌̌äwetay/̌äwetät, d.p. säzvetam/šäzvetat.
käleb m.s., fold, pl. kälayzb.

## CäCeCät/ay

särerät/säreray, bird, pl. säräyar, d. säreretay/särerätit, d.p. säreretam/säreretat.

## CäCuC

sämuy m.s., trough, pl. sämayit, d. sämuyay/sämuyetay.
särur c., dirges, s. särurät.
hädud m.s., thunder, pl. hädayad, d. häduday.
häṣur m.s., hedge, zariba, pl. häsayar (häsurät, branch for making zariba).
häbuš c., solitary locusts, s. ḥäbusät.
‘ämur f.s., milk-pail, pl. ‘ämayar, d. ‘ämurät.

## $\mathrm{CäCoC}$

'äbot f.s. grandmother, pl. 'äbotat.

## CäCoCät/ay

täkobät, grass mat, pl. täkayzb, d. täkobätit, d.p. täkobetat.
häromay, bell, d. härometay.
CaCa C
faras m.s., horseman, pl. farsotat.

CaCeC －（cont．）
samon f．s．，week，pl．samnotat，d． samnätit／samantätit，d．p．saman－ tetat．
sahal m．s．，shore，pl．sahlotat．
$z a b a t$ m．s．，officer，pl．zabbat．
katzm f．s．，ring，pl．katmotat，d． katmätit，d．p．katmetat．
kafar m．s．，infidel，pl．kafrotat．
gadam m．s．，plain，pl．gadmotat，d． gadmetay．
qac̣̆al m．s．，little bell，pl．qac̣lotat，d． qac̣letay．
haṭar 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．
çac̣ut m．s．，chick，pl．と̣äčawit，d． と̣ačutay，d．p．と̣ačutam．
sabun c．，soap，s．sabunät．

## CiCVC

birob m．s．，grass sack，pl．bäwarab． tikas m．s．，nomadic hut，pl．täkayos．

## CeCVC

Keṭan m．s．，devil，pl．צäzatṭan，d． Yeţannay，d．pl．צ̌eṭannetam．
mezan f．s．，scales，pl．mäwäzzzn／ mezanat．
hesas c．（？），rancid butter，pl． häzwässas，d．p．hesassat．

CoCaC（ät／Cät）
kofyät，Muslim hat，pl．kofyotat． $q o b a^{〔}$ m．s．，hat，pl．qäwaba＇． moṭa＇m．s．，sling，pl．mäwätta＇． moqəh m．s．，fetter，pl．mäwäqqวh． horommät，pass，pl．häwärram．

## CoCäC

foqäy m．s．，inside of shoulder，pl． fäzuäqqi．
ğohär m．s．，diamond，pl．ğäzuahor．
kokäb m．s．，star，pl．käwakəb．
kokän m．s．，hollow rock with water in it，pl．käwakan．
צokän f．s．，antelope，pl．צäzäkkan， d．sokannät．
mokäs m．s．，ladle，pl．mäwäkkəs．
hoğäb m．s．，eyebrow，pl．ḥäwağğab．
＇obäl c．，kind of tree，s．＇oballät．
CoCaC
sotal m．s．，curved dagger，pl．säzäf－ tal，d．sotallay．
molad m．s．，relative，pl．mäwällad．
rošan f．s．，storied building，pl． räzvǎ̌in／räzvä̌̌̌̌ən，d．rošənnätit，p． rǒ̆ənnay，d．p．rošannetat，p．p． roگ̌annetam．
roman c．，pomegranates，s．，roma－ nät．
$\mathrm{Ca} C \operatorname{Ca}(t)$
təkla m．／f．s．，wolf，pl．täkällit，d． takletay／təkletät，d．p．tekletam／ takletam．
təgrat f．s．，waterpail，pl．tägärri，d． tagretät，d．p．tagretat．
dobba m．d．，marrow，pumpkin，pl． däbäbbi．
dəkka m．s．，stool，pl．däkäkki，d． dokketay．
sslqa m．s．，beer，pl．säläqqi．
گokna f．s．，hoof，pl．̌äkani．
qasla c．，kind of tree，s．qaslät（or kasra，kasrät）．
magda m．s．，bonfire，pl．mägäddit， d．magdetay，d．p．magdetam．
habsat f．s．，leather bag，pl．häbässi．
$\mathrm{CaCCi}(t)$
so'li f.s., picture, pl. so'litat, d. so'lität.
çab'it f.s., finger, pl. 'äçaba', d. と̌ab‘ität.
ţombi f.s., ball, pl. tänäbbit, d. tambität.
qalfi m.s., button, pl. qäläffit.
masli m.s., image, pl. maslitat, d. maslitay.
həndi m.s., hoof, pl. hänäddi.

## $\mathrm{CaCCe}(t)$

dagge m.s., town, pl. dägäggit, d. daggetay, d.p. daggetam.
sarre m.s., trousers, pl. särärrit, d. sarretay.
garre m.s., lizard, pl. gärärrit, d. gorretay, d.p. garretam.
qambet f.s., backyard, pl. qänäbbi. 'atye f.s., noble lady, pl. 'atyetat.

## CaCCu

dəmmu m./f.s., cat, pl. dämämmit, d. dommutay/dammätit, d.p. dam-metam/dammetat/dammutam/dammutat.
šallu m.s., squirrel, pl. šälällit, d. §allutay, d.p. šallutam.

## CaCCo

saqlo m.s., hut, pl. säqällit, d . saqlotay, d.p. saqlotam.
gonto f.s., young female baboon, pl. gänättit.
'ətro f.s., water jug, pl. ‘ätärri, d. 'atrotät, d.p. 'atrotat.

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.
sägla c., fig trees, pl. šägali, s. ̧äglät, d. šäglätit.
gärwa m.s., male antelope, pl. gäräzvit, d. gärwetay.
qähwa m.s., coffee, pl. qähazvi (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.
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.

## CäCCe(t)

צ̌ärbe m.s., soup, pl. säräbbit.
kädbet f.s., floor, pl. kädäbbi.
hämle c., vegetables, s. hämletät.
'ärve m.s., serpent, pl. 'ärawit, d. 'ärvetay.
wägre c., olives, pl. wägari, s. wägretät/wägretay (tree/wood).

## $C a ̈ C C o(t)$

fändot f.s., buttock, pl. fänadi.
bäqlot f.s., thigh, pl. bäqari.
därno/dänro m.s., bottom of spine, pl. däränrit.
$\mathrm{CäCCo}(\mathrm{t})$-(cont.)
dä'ro c., sycamores, pl. da'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

tayta c., bread, s. țaytätit.
katra f.s., pigeon, pl. kätärri/ katratat, d. katrätit, d.p. katretat.
gašáa c., guests, s. gaššay.
rawya m.s., stork, pl. rawyatat, d. rawyetay, d.p. rawyetam.
wança f.s., drinking-horn, pl. wänäctecti, d. wanc̣ätit.
walta f.s., shield, pl. wälättit, d. waltätit.
qançi c., straw, pl. qanc̣itat, d. qančität.

## CeCCV

derho m./f.s., fowl, pl. däräwsh, d. derhotay/derhotät, d.p. derhotam/ derhotat.
'eṭro f.s., dikdik, pl. 'äṭärri, d. 'eṭrotät, d.p. 'etrotat.

## CoCCV

soldi m.s., money, pl. säladi, d. solditay, d.p. solditam.
mokla m.s., youth come of age, pl. mäkällit.

## $\mathrm{C}{ }^{2} \mathrm{CCə} \mathrm{C}$

dagdag c., land higher than other, pl. dägäddag, s. dəgdaggät.
dangal f.s., virgin, pl. dänagal/ dänäggal.
dərfən m.s., young ram, pl. däräffon, d. darfonnay (a fine lad), p. darfenay.
darsas c., sandstone, pl. därässas, s. darsasät.
daldal m.s., bridge, pl. däläddal.
šanrab f.s., bruise, pl. šäränrab, d. šanrabätit.
ganşal m.s., shot-gun, pl. gänäṣsal, d. ganselay.
qənqən c., weevil, pl. qänäqqən, s. qәnqәnnay, d. qәnqenay.
qalçam f.s., wrist, pl. qäläççam, d. qolçamätit, p. qalçemay, a. qalç̣ammay (or s., 'piece of . . .').
masgad m.s., mosque, pl. mäsagad, d. mäsgeday (mäsgedät $=$ area for praying).
mašdag/məštəq f.s., cheek, pl. mäs̆adəg/mäšatoq.
mankab m.s., shoulder, pl. mänakab, d. mänkebay.
məhbb‘' f.s., hiding place, pl. mohaba', d. mahba'ätit, p. mahba'etay.
$m a ' t a n$ m.s., water hole, pl. ma'atan, d. ma'tenay.
$m \partial^{\prime} k a n$ m.s., store, pl. ma'akan.
maltoh m.s., temple (of head), pl. mälatah.
'anğah c., quartz, s. 'anğahät, d. 'anǧəhätit.
'ankar m.s., direction, pl. 'änäkkar.
hanțal f.s., appendage, pl. hänättal.
halqวm m.s., throat, pl. häläqqəm.
'andor f.s., bamboo flute, pl. ‘änäddor, d. 'əndarätit.
'ankar m.s., puppy, kitten, cub, pl. ‘änäkkar, d. ‘ənkarray, p. ‘onkeray, d.p. 'ənkeram.

## $\mathrm{CaCCəC(C)ät}$

tankallät, plait, pl. tänäkkal, d. tankallätit, p. tankalletay.
təffa‘ät, saliva, pl. țäfäffa'.
dabbayät, ambush, pl. däbäbbi/ dobbayotat.
šanrahät, dried meat, pl. צäränrəh. gargammät, wind-pipe, pl.gäräggam.
'atfayät, hearth-stone, pl. 'ätafa'.
'ankallät, hill, pl. ‘änäkkal, d. 'ankallätit, p. 'ankallay.

## VOCABULARY

## CaCCäC(ät)

tənhäg f.s., palate, pl. tänhəg.
dammäl f.s., vengeance, pl. dämämmal.
dagläl m.s., tribal chief, pl. dägällal.
 qərqäb m.s., clog, pl. qäräqqəb.
madmä' f.s., stroke, pl. mädama', d. mädmə ätit.
hammäm m.s., leopard, pl. hämämmit, d. həmmemay/həmmämmay. hammärät, baobab, pl. hammärotat.

## $\mathrm{CaCCaC(ät)}$

fağğan m.s., coffee cup, pl. fäğağin.
bastan m.s., garden, pl. bäsatin, d. bastenay.
barmay m.s., grass tick, pl. 'äbormät/bärämmit.
tambak c., tobacco, s. tambakät, d. tombakätit.
zənnabät, headscarf, pl. zäñännzb.
צoftay m.s., brigand, pl. צäättit.
şbbak f.s., window, pl. säbäbbok, $X$ d. šabbakätit.

צ̌ankar m.s., nail, pl. šänäkkar, d. šankeray.
צ̌rnay/(̌̌nray c., wheat, pl. šäränri) säränrit, s. šrrneyät, d. šrrneyätit.
צ̌rraf m.s., piece, pl. särärrof.
ب̣ançay m.s., fly, pl. ب̣ănaç̣̣̌it, d. çançeyay, d.p. čančeyam.
ب̆arram f.s., bandage, pl. ẹärärrom, d. carremät.
kabbayät, earthenware vessel, pl. käbabi.
kassar c., food, s. kasserät.
karbağ f.s., whip, pl. käräbbağ, d. karbeğăt.
kartaf m.s., card, pl. kärättaf, d. kartefay.
karmad m.s., tree stump, pl. kärämmad.
karran m.s., group of animals separated in hunting, pl. kärärron.
gonday m.s., dry wood, pl. gänäddit.
galbab m.s., veil, pl. gäläbbəb.
mafraq f.s., hole, pl. mäfaraq.
mafgar f.s., exit, pl. mäfagar.
matraq f.s., hole, pl. mätaraq, d. matreqät.
masbar f.s., broken limb, pl. mäsabar.
masțar f.s., crack, p. mäsator.
masmar m.s., nail, pl. mäsamar, s. masmeray.
maskab f.s., sleeping-place, pl. mäsakab, d. maskebät.
masqal f.s., hanger, pl. mäsäqəl, d. masqelät.
məร̆fat f.s., seam, pl. mäs̆afot.
mastat f.s., tear (in cloth), pl. mäšatat.
makrar f.s., sleeping-place, pl. mäkarar.
$X$ makray f.s., place for putting something, pl. mäkari.
məkyad f.s., track, pl. mäkayzd, d. makyedät.
ma'tay f.s., entrance, pl. ma'ati.
mahfan f.s., hot place, pl. mahafan.
mahdar f.s., place to settle, pl. mahador.
mahsab f.s., washing-place, pl. mahaszb.
mahrad f.s., slaughter-house, pl. maharad.
ma'rag f.s., way up, pl. mə'arag.
marqa' f.s., patch, pl. märaqa'.
marraq f.s., saliva, pl. märärraq.
mawhaz f.s., ditch, pl. mäzwahaz, d. mawhezät.
naggarät, drum, pl. nägagir, d. naggarätit.
nassal m.s., tongue, pl. näsässal, d. nasselay, p. nasselät.
nəə̣saf m.s., carpet, pl. näsäṣssf, d. nassefay.
haggaf m.s., dry creek, pl. hägäggaf. honšǎ m.s., old grass mat, pl. hänäšš̌̌.
labbas m.s., cloth, pl. läbäbbas, d. (p. ?) labbesay.
laddat m.s., door-frame, pl.'äläddat.

## CaCCiC

mastir m.s., secret, pl. mäsäțtar, d. mastiray.
karbit c., matches, s. karbität, p. karbitay (a spent match).
'assit f.s., woman, pl. 'änas, d. 'assität, p. 'assitay, d.p. 'ənsetat, p.p. 'ənsetam.
h̆ənziz m.s., cockchafer, pl. hänäzzะะ.

## $\mathrm{CaCCuC}^{2}$

baggu' m.s., sheep, pl. 'äbaga', f. bagga'ot, d. bagga'utay/bagga'atit, d.p. 'äbag'etam/'äbag'etat.
dabbur m.s., arable hill land, d. dabburay.
šangul m.s., young man, pl.s̈änäggal.
šltut m.s., rag, pl. šälättat, d. šaltutay.
karku' m.s., wax in ears, d. karka'utay.
katkut m.s., young bird, pl. kätakut/ kätakit, d. katkutay, d.p. katkutam.
$q \partial r t ̣ u t c$ c., corn (maize and millet), s. qarṭuṭät, d.p. qartutum.
hoškul m.s., small leather bag, pl. häs̈äkkal.
hənğur m.s., hornet, pl. hänäğğar, d. hanğuray.
halbub m.s., millipede, pl. häläbbab. 'วffun c., maize, pl. ‘äfäffon, s. 'วffunät, d.p. 'วffunat.

## $\mathrm{CaCCoC(ät)}$

dabbokät, kind of bread, pl. däbäb$b \not b$.
dərbobät, ant-hill, pl. däräbbab.

## $C a ̈ C C ə C(a ̈ t)$

täb'ən c., crawling insects, s. täb'enay, d. täb'enetay.
täbbal f.s., grass milk-jar, pl. 'ätäbbal.
därham f.s., money, pl. därahom, d.p. därhemat.
mäftah̆ m.s., key, pl. mäfatah, d. mäftohetay, d.p. mäftzhetam.
mäbrahät, lamp, pl. mäbarhat, d. mäbrohätit, p. mäbrohetay.
mädbə' m.s., lid, pl. mädaba'.
mädfa' m.s., cannon, mädafa'.
mätbo‘ m.s., stamp, seal, pl. mätabə (mätbo'ät printing-press).
mämhar m.s., teacher, pl. mämharät. mämfa'ät, profit, pl. mänaf‘ät.
mändə'ät, place where nothing grows, pl. mända'otat, d. mända‘ätit.
'äm'al m.s., day, pl. 'äm'วlotat, d.p. 'äm'elat (cf. ma'al).
'äb' $\partial b$ m.s., grandfather, pl. 'äb'əbotat.
'äs'ən m.s., pair of shoes, pl. 'äs'ənotat, s. 'äs'enät, d. 'äs'enätit.
häşhas c., gravel, s. häṣhaṣät, d. häṣhoṣätit, d.p. häṣhoṣat.
'ällaṣ f.s., big hawk, pl. ‘älällas, d. ‘ällaṣät, d.p. ‘ällaṣetat.

## CäCCäC

färfär c., kind of tree, s. färfärät, d.p. färfäretat.
tärkäz f.s., heel, pl. täräkkaz.
dämbär m.s., feather, wing, pl. dänäbbar, d. dämberay.
ğänğär m.s., chain, pl. ğänağar.
kämfär f.s., lip, pl. känäffar, d. kämfärät/kämfärätit.
kärfäz m.s., part of plough, pl. käräffaz.
mäthän f.s., mill, pl. mäthən.
mäskäb m.s., dwelling-place, pl. mäsakab, d. mäskebay.
mäshäl f.s., whetstone, pl. mäshal, d. mäshelät.
mäswäd m.s., leather bag, pl. mäsazvad, d. mäsweday.
mäs'än m.s., loaded beast, pl. mäṣ‘$\partial n, ~ d . ~ m a ̈ s ̣ ‘ e n a y, ~ d . p . ~ m a ̈ s ̣-~$ 'әnam.
mäswär m.s., handle, pl. mäṣawar.
mäšräb m.s., rain pipe, pl. mäs̆arzb.

## CäCCäC-(cont.)

mächär m.s., pot for carrying fire, pl. mäẹhar, d. mäçheray.
mäkfän m.s., shroud, pl. mäkafon, d. mäkfenay.
mäktäb m.s., office, pl. mäkatəb.
mägzäm m.s., yoke of plough, pl. mägazzm. d. mägzemay.
mäqdäb m.s., bone of spine, pl. mäqadab.
mäqṭän m.s., small of back, pl. mäqaṭan, d. mäqtenay.
mämfär m.s., wing, pl. mänafər, d. mämferay.
mämbär m.s., chair, pl. mänabar, 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. mahabar, d. mähberay.
mähdär m.s., living place, pl. məh̆adar, d. mäh̆deray.
mähzäl m.s., sling for carrying child on back, pl. mohazol, d. mähzelay.
mähgä̈z m.s., need, pl. maḥagəz, d. mähgezay.
mähtäm m.s., rubber stamp, pl . mahatam, d. mähtemay.
mä‘ṣäd m.s., sickle, pl. ma'aṣad, d. mä'ṣeday.
märbäb f.s., fishing net, pl. märabab, d. märbebät.
märkäb f.s., ship, pl. märakab, d. märkäbät.
märgäm m.s., curse, pl. märagam. märwäd f.s., ring, pl. märäzvad, d. märwedät, p. märweday.
mälgäb f.s., stone side of grave, pl. mälagəb, d. mälgebät.
näggäl m.s., young goat, f. näggälat, pl. 'änäggal, d. näggelay/ näggälütit, d.p. näggelam/näggäletam/näggelat/näggäletat.
hängäl m.s., brain, pl. hänäggol, d. hängelay.
härgäs m.s., crocodile, pl. häräggos, d. härgesay, d.p. härgeşam.
‘äskär c., soldiers, s. 'äskäri, d. 'äskäritay.
‘ästär m.s., sky, pl. ‘äsättor.
'äggär c., hunters, s. ‘äggärtay.
'äqqač c., soldiers, s. 'äqqäytay.
‘änqär f.s., palate, pl. ‘änäkkar.
‘ärqäb f.s., scorpion, pl, ‘äräqqəb, d. 'ärqebät.
'älläč c., foreigners, s. ‘älläytay.
wälwäl m.s., breeze, pl. wälawal, d. wälwelay.

## $C a ̈ C C a ̈ C a ̈ t$

dägdägät, dusty place, pl. dägäddag.
sälsälät, chain, bracelet, pl. sälsälotat.
mäsdärät, waistcoat, pl, mäsadar/ mäsdärotat.
‘änsäbät, sinew, ‘änässob, d. ‘änṣabätit.

## CäCCaC

bärrad m.s., tea-kettle, pl. 'äbardät/ bärarid/bärärrad.
tämsal m.s., reflection, pl. tämässal.
dällal/dällalebay c./m.s., agent, middle man, pl. dälalib (or dällal).
šäqqat c., merchants, s. säqqatay/ s̈äqqatebay.
källat c., earthenware, s. källetay.
'äddam m.s., person, pl. 'äddamat, d.(p. ?)' 'äddemay.
'äšam c., precious stones, s. ‘äşsemät.
'änğab c., teeth, s. 'änğebät, d. 'änğebätit, d.p.'änǧebat(cf. nibät).
härmaz m.s., elephant, pl. härämmaz, d.p. härmezam.
‘änṣay f.s., mouse, pl. ‘änäṣsit, d. ‘änseyät, d.p. ‘änseyat.
‘ärqay m.s., bed, pl. ‘ärqayotat.
$C a ̈ C C i C(a ̈ t)$
bärmil m.s., barrel, pl. bäramil, d.

CäCCiC(ät)-(cont.)
bärmilay/bärmiletay, d.p. bärmilam/bärmiletam.
säkkin m.s., dagger, pl. säkakin.
säg'it/säqlit m.s., pad for carrying loadon head, pl.šäqällit/šäg'itotat. ğämbil/zämbil m.s., basket, pl. gänabil/zänabil.
mäskin/müskin m.s., poor man, pl. mäsakin/mäs̆akin, d. mäskinay, f. mäskinät.
mändilät m.s., scarf, pl. mänadil.
mäntig m.s., bow and arrow, pl. mänaṭig.

## 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.
Łärmuz f.s., bottle, pl. țäramuz/ täramiz, d. tärmuzät.
sämbuk, f.s., boat, pl. sänabik.
sämbu' f.s., lung, pl. sänäbba', d. sämbu'ät (or s. 'a piece of . . .').
sänduq m.s., coffer, chest, pl. sänaduq.
šärmuṭ f.s., prostitute, pl. säramut,/ צäramiṭ, d. šarmuṭät.
mäfrud m.s., half-grown camel, pl. mäfarid, d. mäfruday, d.p. mäfrudam.
mäsruf m.s., food, pl. mäs̆arif.
mäkruh m.s., evil-doer, pl. mäkarih, d. mäkrahetay.
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. g̈äradin.
qandel f.s., small lamp, pl. qandelotat, d. qandelät.
‘ankel m.s., circle, pl. ‘änäkkal.

## CoCCVC

koskos m.s., pot for roasting coffee, p. käsäkkas, d. koskosay/koskosetay.

## $C V C V C V(t)$

badela/badelät f.s., spade, pl. badelatat/badelotat.
fälasit m.s., priest, pl. fälläs, d. fälasitay.
fätäna m.s., problem, pl. fätänotat. daqala m.s., bastard, pl. däqällit, d. deqeletay.
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. säqületay.
käbäsa m.d., highland, pl. käbäsatat.
käbäro m.s., drum, pl. käbärotat.
gäzämo m.s., chopper, pl. gäzämotat, d. gäzämetay.
gumare m.s., rhinoceros, pl.gumaretat.
garade m.s., scimitar, pl. garadetat. qomito m.s., pile of grain, pl. qәmitotat.

## CVCVCV $(t)$-(cont.)

mäṣori m.s., strap-handle, pl. mäṣawar.
mašela c., sorghum, pl. mäšälli, s. mašelät, d. mašelätit, d.p. mašelat.
mäčarit f.s., top of jaw, pl, mäب̆ärri.
mäkina m.s., engine, pl. mäkayan/ mäkinotat (but mäkinät motorcar).
näṣäla m.s., robe, pl. näsälatat.
'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.
wašaṭe m.s., minor apartments, pl. wasatetat.
wäreza m.s., bachelor, pl. wärazit, d. wärezetay, d.p. wärazitam.
rämadic., quitch grass, s. rämadität. yдhudi m.s., Jew, pl. 'äyhud.

## $C V C C V C V(t)$

donkala m./f.s., kind of deer, pl. dənkalatat, d. dankaletay/dankalätit, d.p. dankaletam/dankaletat.
tärqoba m.s., heel, pl. täräqqab/ tärqobatat.
sälsäla m.s., bamboo, pl. sälässal.
şargəya f.s., highway, pl. șargayotat, d. sargayät.
käddamit f.s., servant, pl. kädäd$d \partial m$.
ganda'e c., kind of tree, s. ganda'etät.
garguma m.s., wind-pipe, pl. gäräggam.
masmasa m.s., reason, pl. mäsämmas.
'ämbäta c., locusts, s. 'ämbätetay.
'ongera f.s., piece of bread, pl. 'änäggar, d. 'ongerätit.
'änkäbot f.s., spider, pl. 'änäkkab, d. 'änkäbotät.
'arbana m.s., pole of plough, pl. 'äräbban/'arbanatat.
hombaša f.s., wheaten bread, pl. hänäbbaš, d. hambasätit.
hangora f.s., wooden spear, pl. hänäggar.
ḥrtuma m.s., shin-bone, pl. härättam.
‘äqhəma c., black ants, s. ‘äqhamät.
'amboba c., flowers, pl. 'ambobatat, s. 'ambobät.
robba'it f.s., measure, pl. räbäbba'.

## CVCVCCV(t)

dara'to m.s., quilt, pl. därära'.
c̣äqämte c., kind of tree, s. c̣äqämṭetät.
šagarti c., onions, s. Kagartität.

karamba m.s., cabbage, pl. karambotat.
garašša m.s., porcupine, pl. garaššotat, d. garašsetay, d.p. garǎ̌̌etam. modošša m.s., hammer, pl. modošsotat.
mäsänqo m.s., harp, pl. mäsänqotat.
naragge c., bitter orange, s. naraggetät.
härabso f.s., blister, pl. härabsotat, d. härabsotät.
haäräzvya m.s., wild pig, pl. häräzvyatat, d. häräwyetay, d.p. häräwyetam.

## CVCCVCCV(t)

baldänga c., beans, s. baldängät. borkatta m.s., bread, pl. bäräkkat.
čambal'e c., butterflies, s. ب̌ambal'etät.
gämmänne f.s., lioness, pl. gämmännetat.
gamfalle m.s., thumb, pl.gamfalletat, d. gamfalletay.
mäntälle f.s., hare, pl. mäntälletat, d. mäntällätit, d.p. mäntälletat.
'äg'arra m.s., herd, flock, pl. 'äg'arrotat.
'ənqoqho m.s., egg, pl. 'anqäzwaqah, d. 'anqoqhotay, d.p. 'anqoqhotam.

## CVCCVCCV $(t)$-(cont.)

hambarra m.s., navel, pl. hombarratat.
'ormadde c., supporting poles for plants, s. 'armadday, p. 'armeddetay.

## CVCVCVC(ät)

bäțaṭǐ c., potatoes, s. bäṭaţis̈ät, d.p. bätatisisat.
tälakam m.s., husband's brother, pl. tälakmotat.
säkänab f.s., pot, pl. säkännab, d. šäkänebät, d.p. säkänebat.
gäräzvin m.s., pick-axe, pl. garäwinotat.
gäräwan m.s., big tin, pl. gäräwanotat.
$\times$ makawal f.s., hiding place, pl. mäkawol, d. mäkəwelät.
mäక̆eräb m.s., bodkin, pl. mäsarab.
mälasäs m.s., fly-whisk, pl. mälasäsotat, d. mälasesay.
'äräbiyät, hand-cart, pl. ‘äräbiyotat, d.p. 'äräbiyetat.

## CVCCVCVC(ät)

saltanyät, enamel pot, pl. solṭanyotat.
gälläbyät, long Muslim shirt, pl. ğälläbyotat.
mäd'ošat m.s., fireplace, pl. mäd'osatat.
'วmmolad f.s., midwife, pl. 'วmmoldotat.

## CVCVCCVC(ät)

qalanqal c., euphorbia, s. qalanqelät/ qalanqelay (tree/wood).
mäzärgäf m.s., comb, pl. mäzäragaf. matənkab f.s., ascent, pl. mätänakab. mätär'äs m.s., pillow, pl. mätär'as, d. mätär'esay.
mašandäh f.s., cut on body, pl. mäsänadoh.
mäkästär m.s., brush, pl. mäkäsatar/mäkästrotat.
magassay f.s., seat, pl. mägasit.
mägälbäb m.s., head-scarf, pl. mägälabab.
mahongag f.s., scratch, pl. mohänagag, d. mahangegät.
marabba'ät f.s., stone house, pl. märäbaba', d. marabba'ätit, p. marabba'etay, d.p. marabba'etat.
'ädängäl c., French beans, s. 'ädängälät.
härästay m.s., farmer, pl. härästot.

## CVCCVCCVC

'ənqər'ob f.s., frog, pl. 'onqar'obatat, d. 'anqar'obätit, d.p. 'anqar'obetat.

4 syllables
samagalle c., nobles, s, ̌̌amagallay.
säbänkälay m.s., young cattle, f. sä̈bänkälit, pl. §äbänkälatat.
ب̆ambarra'o f.s., little finger, pl. と̌ambarra'otat, d. ب̌ambarra'otät.
mäkäyälim.s., measure, pl. mäkayel.
mäkärkähit f.s., knocker, pl. mäkärakah.
mäkäskäsit f.s., pot for roasting coffee, pl. mäkäs̆akəš.
märawito f.s., chameleon, pl. märawitotat.
'äbgahäru m.s., male baboon, pl. 'äbgəhärutat, d. 'äbgohärutay, d.p. 'äbgahärutam.
'uralali m.s., bat, pl. 'uralitat.

## ADJECTIVES

The adjectives are listed under headings that refer to the sections of § 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 § 8, and not restated here.
Like gäzif'thick'§8.I (i):

| säbib | narrow | märir | bitter |
| :--- | :--- | :--- | :--- |
| sälim | black | mätiq | fresh (milk) |
| qätin | thin | räyim | tall, distant |
| qälil | light (weight) | roḥib | wide, large |
| haçicir | short |  |  |

Like wäğ̀ib 'fertile', § 8.I (i):
da‘if weak
Like gädud 'barren', § 8.1 (i):
näqu ${ }^{\text {' }}$ fresh (of first water coming from spring after rain)
Like hänkiš 'with a limp' §8.1 (ii):
hänkil with a twisted limb
Like kabud 'heavy' § 8.2 (i):

| barud | cold |
| :--- | :--- |
| borur | single |
| torud | strong |
| dobur | poor |
| dohur | low |
| talul | wet |
| sadud | needy |
| somum | dead |
| sotur | unclear (speech) |


| sagub | rich |
| :--- | :--- |
| kabur | important (man) |
| gomus | poor |
| golul | foolish |
| hafun | hot |
| rohuq | far |
| 'ssuf | double |
| yobus | dry |

Like dongur 'slow', § 8.2 (i):

| daqqub | strong |
| :--- | :--- |
| soltun | quick |
| galbub | dull (sky) |

Like 'əwur 'blind', § 8.2 (i):

| ta‘um sweet | foaqul high |  |
| :--- | :--- | :--- | :--- |
| hawuz | fat |  |

Like bazuh 'many', § 8.2 (i):

| šaluh | thin | malu' | full |
| :--- | :--- | :--- | :--- |
| kafu | bad | rotu | right |
| qalu $^{\text {a }}$ | clear (speech) | rasuh | dirty |

Like 'əkkuy 'bad', § 8.2 (i):
пәшпиу (nunuy) a little sorry.
Broken plurals were also noted for kabud, galul, gamus, and 'əwur, (class XI gälayal, \&c.) and for sagub, kabur, and gamus (class XXI ṣäggäb, \&c.).

Like hamaq 'weak', § 8.2 (ii):

| barah | light (opp. dark) | mašaq | looking tired |
| :--- | :--- | :--- | :--- |
| tafah | smooth | hada' | quiet |
| dafo' | plump (animal) | hagəl | poor |
| safəq | quick | rakəb | rich |
| kaməl | productive (plant) | rata $^{\text {c }}$ | fairly well off |

Like hayas 'noble', § 8.2 (ii):
qayoh pregnant
Like čäggar 'hairy', § 8.2 (ii):
däbbas hunch-backed
säffar with long nails
çäbba $\quad$ with six fingers
gällal brave
gäbbah with large forehead
gännad strong
'äddag slow
'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.


[^0]:    ${ }^{\text {I }}$ On the grouping see W. Leslau, 'Archaic features in South Ethiopic', f $A O S$ 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, 'Deminutivund 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.

[^1]:    ${ }^{1}$ Publications of the Princetown Expedition to Abyssinia, Leyde, r9io-rı.
    ${ }^{2}$ Per cura della Missione cattolica dell'Eritrea, Asmara, 1919.
    ${ }^{3}$ 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', 7 AOS lxviii. 3, 1948.
    ${ }^{5}$ Wiesbaden, 1956- . ${ }^{6}$ Cf. p. ix, n. 2.

[^2]:    ${ }^{1} p$ 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.

[^3]:    ${ }^{1}$ Below, § 1.3.

[^4]:    ${ }^{1}$ 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.
    ${ }^{4}$ Cf. § 5.2.1.
    ${ }^{6}$ Cf. §§ 6.3 .9 and 7 (iii).
    ${ }^{3}$ Cf. §§ i.r, 5.1.2, and 7 (ii).
    ${ }^{5}$ Cf. § 7 (ii).
    ${ }^{7}$ Cf. § 4.I. 2 (v).

[^5]:    ${ }^{1}$ Cf. § 7 (vi).
    ${ }^{2}$ Cf. § 7 (vii).

[^6]:    ${ }^{1}$ Cf. " "Openness" in Tigre', 569-74.
    ${ }^{2}$ Examples of final $h$ or ' are rare with the nouns but more common with verbal forms as lagbä' 'let him come' and lofräh 'let him fear'.

[^7]:    ${ }^{1}$ Cf., with the same genders and meanings, Tigrinya bätri.

[^8]:    ${ }^{1}$ 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).

[^9]:    ${ }^{1}$ 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.

[^10]:    ${ }^{1}$ Cf. F. R. Palmer, 'The broken plurals of Tigrinya', BSOAS xvii. 3 (1955), 548-66.

[^11]:    ${ }^{1}$ Below, § 6.1 .2 (iii).
    ${ }^{2}$ Similarly with the causative prefix of the verb (also 'ä-), as in häfna 'get hot', hafäna 'make hot' (but säbra 'break', 'äsbära 'make . . . break').

[^12]:    ${ }^{1}$ Cf. also the verbal form ‘äqbäla 'he returned'-morphologically a causative.
    ${ }^{2}$ Cf. § I.4.
    ${ }^{3}$ Cf. 'Broken plurals', 551-2.

[^13]:    ${ }^{1} \S 4 . \mathrm{I} .2$ (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).

[^14]:    ${ }^{1}$ This is valid for the other parts of the morphology too, cf. §§ 6.3.3 (p. 56) and 7 (iv).
    ${ }^{2}$ But qärretay, qärru (§§ 6.3.3 and 7 (iv)).

[^15]:    ${ }^{1}$ But 'änğab (collective) 'teeth'一singulative 'änğebät.

[^16]:    ${ }^{1}$ Cf. p. 22 n. i, and § 7 (iv).
    ${ }^{2}$ § 4.2.5.

[^17]:    ${ }^{1}$ i.e. *wähayaz (a before a laryngeal, cf. § r.8).
    ${ }^{2}$ Cf. § 4.2.3 (I).
    ${ }^{3}$ Forms with $a$ as the exponent of the third radical were noted only with this suffix -ät.

[^18]:    ${ }^{1}$ The feminine form is folit; this can be dealt with under § 4.2.4, the plural being written as fälayat, since there is no phonetic distinction between -ya- and -yi-.
    ${ }^{2}$ Cf. § 1.3 (iv). ${ }^{3}$ Cf. also § 4.2.2 (i).

[^19]:    ${ }^{1}$ But cf. §§ 6.3.3 and 7 (vi).
    ${ }^{2}$ Or ba'äl when part of a phrase of the type ba'äl fohäm 'charcoal man'-plural säb fahäm.

[^20]:    ${ }^{\mathrm{I}}$ Cf. § $6 . \mathrm{r} .2$ (iv).
    ${ }^{2}$ Cf. § 4.2.1 (vi).

[^21]:    ${ }^{1}$ Historically a broken plural of mo'al.

[^22]:    ${ }^{1}$ § 1.3 (iv).

[^23]:    ${ }^{1}$ For the gemination and the vowel $e$, see below, (iii) and (v).

[^24]:    ${ }^{1}$ Cf. §2.3.

[^25]:    ${ }^{1}$ 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.

[^26]:    ${ }^{1}$ Cf. §§ 4.2.3 and 4.2.5.

[^27]:    ${ }^{1}$ 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.

[^28]:    ${ }^{1}$ Used often to refer to a strong young boy.

[^29]:    ${ }^{1}$ It is, perhaps, relevant that the singular form qalçara is also collective with the meaning 'shin' (meat), cf. § 6.3.1 (ii).

[^30]:    ${ }^{1}$ Cf. also § 8.3.

[^31]:    ${ }^{1}$ p. 52, § 6.3.2.
    ${ }^{2}$ Cf. Vocabulary, pp. 78-79, for more examples.

[^32]:    ${ }^{5}$ Cf. § 1.7.

[^33]:    ${ }^{\text {I }}$ 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 $d$.

[^34]:    ${ }^{1}$ Cf. §§ 1.4 (i) and 7 (viii).
    ${ }^{2}$ Cf. the forms denoting females in §6.3.3 (p. 53) where the diminutive suffix is $-i t$ following $\boldsymbol{t}$ or $-a t$; but note that şarit is not treated as if it were *saryat (which would imply *saritit).
    ${ }^{3}$ Cf. § 6.3.9 (iv).

[^35]:    CaC
    das(s) m.s., saucepan, pl. 'ädyas, d.
    dassetay.

