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A Grammar of Ghomara Berber

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Finally, I would like to thank my friends and family for their support, especially Elias and my uncle and aunt Xaři Ahmed and Xatci Isette. I dedicate this dissertation to my dear mother who passed away too soon. I still think of you every day.

Yemma, yemma, yemma, yemma
Glosses and Abbreviations

All elements are glossed are as completely as possible except for nouns. This saves a lot of space on the glossing line. Number is inferrable from the translation gloss. Where visible only state distinctions are indicated on nouns in most sections. Only in the sections where the noun is discussed are they fully glossed. Verbs are always fully glossed. Person, number and gender of verbal (and other) suffixes are not separated by any sign in order to save space on the glossing line (e.g. 3MS). The abbreviations used are:

- = Morpheme Boundary
= = Clitic Boundary
: = Grammatical Information
1,2,3 = First, second and third person
A = Aorist
CF = Counterfactual
AD = Non-real particle a
ANP = Anaphoric deictic clitic
AP = Active participle
AREL = Arabic relative marker
ART = Article
ASP = Aspect
be:R = Relative form of be
CAUS = Causative prefix
COMP = Complementizer
CRT = Certainty marker d
DC = Deictic clitic
DIST = Distal postnominal clitic
DO = Direct object
EL = État libre
F = Feminine
FR. = French
FUT = §
I = Imperfective
IMP = Imperative
IMPF = Imperfect
IMPP = Imperfective particle ka-
INDEF = Indefinite pronoun
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTJ</td>
<td>Interjection</td>
</tr>
<tr>
<td>IO</td>
<td>Indirect object</td>
</tr>
<tr>
<td>EXST</td>
<td>Existential kayen</td>
</tr>
<tr>
<td>EA</td>
<td>État d'annexion</td>
</tr>
<tr>
<td>M</td>
<td>Masculine</td>
</tr>
<tr>
<td>MA</td>
<td>The element ma</td>
</tr>
<tr>
<td>NEG</td>
<td>Negation</td>
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<tr>
<td>ONM</td>
<td>Onomatopei</td>
</tr>
<tr>
<td>P</td>
<td>Perfective</td>
</tr>
<tr>
<td>PASS</td>
<td>Passive prefix / infix</td>
</tr>
<tr>
<td>PDO</td>
<td>Preverbal indicator of the direct object t / d</td>
</tr>
<tr>
<td>PF</td>
<td>Perfect</td>
</tr>
<tr>
<td>PL</td>
<td>Plural</td>
</tr>
<tr>
<td>PP</td>
<td>Passive participle</td>
</tr>
<tr>
<td>PR</td>
<td>Present relevance particle</td>
</tr>
<tr>
<td>PRES</td>
<td>Presentative particle</td>
</tr>
<tr>
<td>PRH</td>
<td>Pronominal head</td>
</tr>
<tr>
<td>PRX</td>
<td>Proximate</td>
</tr>
<tr>
<td>PST</td>
<td>Past marker</td>
</tr>
<tr>
<td>Q</td>
<td>Question particle ka / waš</td>
</tr>
<tr>
<td>REL</td>
<td>Berber relative marker</td>
</tr>
<tr>
<td>RF</td>
<td>Relative form</td>
</tr>
<tr>
<td>S</td>
<td>Singular</td>
</tr>
<tr>
<td>sp.</td>
<td>Species</td>
</tr>
<tr>
<td>SP.</td>
<td>Spanish</td>
</tr>
<tr>
<td>VOC</td>
<td>The vocative element a</td>
</tr>
</tbody>
</table>
I Introduction

1.1. Berber in Morocco

Berber (also Tamazight\(^1\)) languages are spread all over North-Africa from the Atlantic coast as far as the Egyptian oasis Siwa in the east and Burkina Faso in the south (for general overviews, cf. Basset, 1952; Galand, 1988 and Kossmann, 2012). Morocco has the highest number of Berber speakers. The main Berber speaking areas are the Rif in the north-east where Tarifiyt (Riffian Berber) is spoken, the Middle Atlas where Tamazight (Central Moroccan Berber) is spoken and the High Atlas, the Anti-Atlas and the Sous valley where Tashelḥiyt (Sous Berber) is spoken. According to the 2004 census about 28% of the Moroccans speak a Berber language, meaning that there are approximately 8,300,000 speakers of a Berber language\(^2\). It can be safely assumed that most speakers of Berber also speak Moroccan Arabic (Moroccan Arabic is the lingua franca of Morocco) and, depending on the level of schooling, Standard Arabic and French.

The whole northern part of Morocco, with the Mediterranean in the north, and the Taza corridor and the river Loukous in the south, from roughly Tanger in the west until the mouth of the river Moulouya in the east, is geographically known as the Rif. The mountainous area can be divided in two linguistically different areas; in the East there is the Rif proper where Tarifiyt is spoken as the main language (cf. Lafkioui, 2007). The two main cities are Nador and Al Hoceima. The area to the west is known as the Jbala. Its major towns are Tanger, Tetouan and Chefchaouen. It is Arabic speaking, except for a small pocket of Berber speakers in the Ghomara area, which is the subject of the present study.

1.2. Previous studies

Ghomara Berber (referred to as ššelḥa by the speakers themselves, i.e. by the Morrocan Arabic name for Berber) has been the subject of few studies in the past. The first study is an article by Georges Séraphin Colin from the colonial period (Colin, 1929). In this article he attempted to give an explanation for the existence of this isolated Berber variant. According to him the major trade routs from Fes to the ports of Tangier in the west and Bades in the central Rif caused the spread of Arabic. Only the geographically most isolated area behind the major mountainous chain, the highest peak of which is the Tidighine (2452 meter),

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\(^1\) Tamazight is the recently introduced term used by Berbers to refer to Berber languages in general. Depending on the area the name is used by the speakers for their own language.

\(^2\) This figure is based on the Recensement général de la population et de l’habitat 2004. Some scholars put the number of Berber speakers considerably higher, such as Boukous (50%) and Ennaji (about 40%). For a discussion see Aissati, Karsmakers & Kurvers (2011).
remained Berber speaking. The main importance of the article for Berber linguistics are the five Ghomara Berber texts that are provided. The collection shows that the language has not essentially changed over the last ninety years. Present-day speakers understand the text completely (even though the texts are from a neighbouring dialect of the Beni Mensour). Other studies are a small article by Gaudio (1952) who counted 2,933 Berber-speakers. For years the status of the language was unknown until Peter Behnstedt published an article in 2002 confirming that the language was still spoken and passed on to children. In 2008 and 2010 Jamal El Hannouche wrote an MA Thesis at Leiden University about Ghomara Berber based on his own fieldwork, which he published online³.

1.3. General data
The Ghomara confederation consists of nine tribes which are located in the province of Chefchaouen. Ghomara Berber is spoken in two tribes, Beni Bouzra and an adjacent part of the Beni Mensour (the fraction of the Beni Ėṛuṣ), while all other Ghomarans speak Arabic. The number of Ghomara Berber speakers is approximately 10,000 (El Hannouche, 2010:25). The main center is the Arabic-speaking town of Bou Ahmed, which is the administrative centre and commercial centre (the weekly market is held there). According to the 2004 census, almost nobody in Beni Bouzra had a degree in secondary education or higher, while only a quarter had a degree in primary education. The illiteracy rate was 63,7%. There are two primary schools in Iɛṛaben. For secondary education, pupils have to move to the town Stiḥat some 20 kilometers away.

1.4. Fieldwork and sociolinguistics
For the present study fieldwork was conducted between 2009 and 2013 in the sea-side village Sidi Yahya Ėṛaḥ (usually referred to as Iɛṛaben by the speakers themselves), the largest Berber speaking village in the area. It had about 800 inhabitants in 2004 (El Hannouche, 2010: 170). The village is named after the local saint Sidi Yahya Ėṛaḥ. The village can be divided in two parts; the mountains and the coast. The sea-side character of the village is a recent phenomenon, and all older people were born inland. This has to do with the development of fishing which, as a mode of living, is new in the area. Besides fishing, the main economic activity is farming, most importantly wheat and barley. In addition, some people have their own vegetable gardens and orchards. Another important


crop grown in the area is hemp. Besides farming some people herd goats.

In Iɛṛaben, people have different levels of proficiency in Berber, and different attitudes towards Berber. Everybody from about 10 years upwards knows Berber, but some do not like to speak it, or feel more comfortable speaking Arabic. There are also some families that only speak Arabic. This is partly due to migration (a number of people grew up in the city, often Tetouan or Berkane, and migrated back to the village) and partly due to intermarriage. For the youngest age-group there may be an ongoing shift to Arabic. People indicated that children who were born from 2000 onwards were not being spoken to in Berber. When asked why this was the case, the standard answer was that Arabic would help the children understand the teacher at school. However, in a small survey I conducted in the biggest of the two primary schools, about half of the pupils indicated that they speak Berber at home. There seems to be a difference between the lower and the higher part of the village. The lower part, which is close to the main road leading to Tetouan, seems to be shifting more generally to Arabic than the higher part which is further away from the road. When I asked a local about this matter he said: ‘They consider themselves Tetouani’s,’ i.e., belonging to the big city.

Everybody, including old women, is perfectly bilingual, and therefore some remarks on language choice are necessary. As most of my fieldwork was conducted with men, the following applies only to their behaviour. I have often witnessed people switching between the languages in conversations among each other. The language of communication depends on the person or people spoken to. In small groups where everybody knows Berber, Berber is spoken. In the café on the beach where most men gather most often Arabic was used as the language of communication. Sometimes, however, I would hear people speaking Berber to each other in the café. Higher up in the village while performing daily activities, for example around the water source, in the fields, or at the small shops, most of the time Berber was spoken. To outsiders only Arabic is spoken. Although Arabic plays an important role in Iɛṛaben and is used very often, speakers with a good command of Berber can clearly indicate what is Berber and what is Arabic. As Ghomara Berber is influenced highly by Arabic we shall see this is an important point for deciding what is part of the language and what is not.

The attitude towards Berber is usually negative. I remember one of the first comments I got was: ‘Why do you want to learn our language? We hate it.’ This is related to the perception of the usefulness of the language, which can only be used in the small
surrounding area. In spite of this attitude, speakers are not at all ashamed of speaking Berber. They use it freely among each other in Arabophone environments, such as the market in Bou Ahmed or when they travel to Tetouan. Data were collected using both elicitation and recordings of spontaneous speech. In the beginning elicitation was carried out translating wordlists from Moroccan Arabic to Ghomara Berber, later on Ghomara Berber became the main language of communication. When my knowledge of the language was sufficient I could make up sentences and ask the speakers to judge the grammaticality. At the same time I recorded stories and spontaneous conversations. Most of the spoken material was later transcribed with the help of a speaker. Many people were consulted from different age groups (varying from about twelve years till about ninety years old). Seven people provided the bulk of the corpus, six of which were men. One older woman provided a number of fairy tales. In a later stage, I checked a number of pending questions by means of telephone calls to one informant.

1.5. Dialectal differences

The fieldwork was primarily conducted in Ieraben, but in addition some speakers from the village of Amṭiqan who live in Bou Ahmed were consulted as well. Even though the Ghomara Berber area is very small and there is full mutual comprehensibility between variants, there are some dialectal differences which people are aware of. According to the speakers in Ieraben there are some lexical differences with the variant spoken in Beni Mensour (often they would refer to the variant spoken in Isuḵa, the biggest Berber speaking village in Beni Mensour). Such differences are tawfiḵt instead of tafukt ‘sun’ in Ieraben, aḵfeṭ instead of ayeffeṭ ‘cattle’, niḵnam instead of nuḵna ‘we’, diha ‘here’ instead of dha ‘here’, but also different lexemes such as syeyyu instead of yewwet ‘to scream’. Furthermore, there is a difference in the instrumental preposition with a pronominal suffix: sis- in Beni Mensour versus id- in Ieraben. The present study is essentially a grammar of the Ieraben dialect, but where I know of dialectal differences these have been indicated.

1.6. Arabic influence

When studying the way they are put into line with native structures, there are two types of borrowing in Ghomara Berber. The first type is integrated borrowing: an element is taken over from (mainly) Arabic and integrated into the native morphology. An example of such a borrowing is the noun *aɛžin* ‘dough’ which has an Arabic origin but Berber morphology. The second type is non-integrated borrowing. Many elements are taken over in the language while keeping their original morphology. This type of borrowing is much less common across languages, although in European languages it exists. Examples of this are pairs such as *phenomenon* - *phenomena* and *cactus* - *cacti* in English, which keep their original Greek/Latin singular and plural morphology. In Ghomara Berber non-integrated borrowings are very frequent. This type of borrowing is quite common across Berber, especially with nouns (cf. Kossmann, 2010 and Kossmann, 2013: 208-215). Within Berber, however, Ghomara Berber is unique in that it also borrows verbs which keep their original Arabic morphology (cf. Adamou 2010 for similar cases in Romani dialects).

Berber-morphology verbs distinguish three aspectual forms; the Aorist, the Perfective and the Imperfective (cf. chapter IV.8.). Verbs have conjugational affixes which mark person, number and gender. Many Arabic verbs are borrowed and integrated according to Berber verbal patterns. An example is the following Arabic verb:

\[ \text{fṛeq} \] ‘to separate, to divide’

<table>
<thead>
<tr>
<th>Aorist</th>
<th>Perfective</th>
<th>Imperfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>1S</td>
<td><em>fṛeq</em>-ax</td>
<td><em>fṛeq</em>-ax</td>
</tr>
<tr>
<td>2S</td>
<td>t-<em>fṛeq</em>-et</td>
<td>t-<em>fṛeq</em>-et</td>
</tr>
<tr>
<td>3MS</td>
<td>i-<em>fṛeq</em></td>
<td>i-<em>fṛeq</em></td>
</tr>
<tr>
<td>3FS</td>
<td>t-<em>fṛeq</em></td>
<td>t-<em>fṛeq</em></td>
</tr>
<tr>
<td>1PL</td>
<td>ne-<em>fṛeq</em></td>
<td>ne-<em>fṛeq</em></td>
</tr>
<tr>
<td>2PL</td>
<td>t-<em>fṛeq</em>-em</td>
<td>t-<em>fṛeq</em>-em</td>
</tr>
<tr>
<td>3PL</td>
<td><em>fṛeq</em>-en</td>
<td><em>fṛeq</em>-en</td>
</tr>
</tbody>
</table>

There are also many Ghomara Berber verbs that retain their original Arabic morphology. They are not conjugated according to native morphology of the kind we have just seen, but rather keep their Arabic conjugational affixes. Arabic has two affix pairs to distinguish the Perfect and the Imperfect aspect. The example shows us that the same person, number and gender distinctions are made as in Berber.
ʕreq ‘to sweat’

<table>
<thead>
<tr>
<th></th>
<th>Perfect</th>
<th>Imperfect</th>
</tr>
</thead>
<tbody>
<tr>
<td>1S</td>
<td>ʕreq-t</td>
<td>n-eʕreq</td>
</tr>
<tr>
<td>2S</td>
<td>ʕreq-ti</td>
<td>d-eʕreq</td>
</tr>
<tr>
<td>3MS</td>
<td>ʕreq</td>
<td>y-eʕreq</td>
</tr>
<tr>
<td>3FS</td>
<td>ʕeq-et</td>
<td>d-eʕreq</td>
</tr>
<tr>
<td>1PL</td>
<td>ʕeq-na</td>
<td>n-ʕeq-u</td>
</tr>
<tr>
<td>2PL</td>
<td>ʕeq-tum</td>
<td>d-ʕeq-u</td>
</tr>
<tr>
<td>3PL</td>
<td>ʕeq-u</td>
<td>i-ʕeq-u</td>
</tr>
</tbody>
</table>

Arabic non-integrated borrowings are also found in the adjectives and in the pronouns (cf. chapter III.9. and chapter III.11.).

1.7. Code-switching or borrowing?
The type of borrowing shown above looks a lot like code-switching and there are of course many clearly identifiable instances of code-switching in our Ghomara Berber corpus. However, there are a number of arguments not to consider non-integrated verbs (or similar elements) as code-switches.

First, the choice of paradigm (integrated or borrowed) is not free. The verb exemplified above, and many others (about 19% of the verbs in my corpus) can only be used with Arabic morphology, while other loan verbs are only accepted with Berber morphology. Native speakers have consistent judgments about which non-integrated forms belong to Ghomara Berber and which not. I have on several occasions tried to conjugate a non-integrated verb using native Berber conjugation, but such forms were considered errors by the speakers and they would correct them by using the Arabic form. Furthermore, while non-integrated elements are mostly indistinguishable from their Arabic equivalents, when asked, speakers clearly state that they do belong to their ššelḥa (Berber). I have often heard ‘That is how we say it.’ On one occasion, when I asked if the Arabic-morphology verb kma - ikmi ‘to smoke’ could be used instead of the equivalent Arabic-morphology verb tkeyyef ‘to smoke’, also an Arabic-morphology verb, the speaker answered that kma is Arabic while tkeyyef is ššelḥa. This indicates that the speaker has a clear idea about which lexemes belong to Ghomara Berber, irrespective of their origin or the type of morphology used. Secondly, many of non-integrated borrowings refer to basic items which are used in
everyday live. Non-integrated forms are in many cases the only possible expression for concepts of daily life, like ḍreq ‘to sweat’, ḍteš ‘to be thirsty’ ḍḥsem ‘to be ashamed’, ḍqra ‘to learn, to read’ ḍṭleb ‘to ask for’ and ḍfeḥ ‘to cultivate’. Third, there is a morphological distribution between integrated and non-integrated morphology with Arabic loan verbs. With underived Arabic-etymology stems the type of conjugation cannot be predicted, and it is a lexical choice whether the verb has Berber (integrated) morphology or Arabic (non-integrated) morphology. Derived stems, on the other hand, have a clear pattern of distribution, which is the following:

- geminating derivation (argument-adding): only Berber conjugation
- t-affixed derivations (reciprocal, passive): only Arabic conjugation
- n-prefix derivation (passive): only Arabic conjugation

While it is difficult to see why this distribution is the way it is, it is incompatible with a code-switching analysis. A final argument is that Arabic-morphology verbs are already found in the text published by Colin (1929), showing the stability of the phenomenon over a long period. In example (1) an underived verb sleḵ is used (the original transcription is adapted). In example (2) the t- derived verb tfeṛṛez ‘to watch’ is used. In the original text the next line has the same verb which again has Arabic morphology, shown in example (3). Both these verbs are non-integrated verbs in present day Ghomara Berber:

(1) nekkin d a ḵ ml-ax mk a ka-te-sleḵ (p. 53)

I CRT AD 2MS:DO show:A-1S how REL IMPP-2S:IMPF-survive

‘I will (certainly) show you how to survive.’

(2) i-bda ka-y-tfeṛṛez (p. 53)

3MS-begin:P IMPP-3MS:IMPF-watch

‘He began to watch.’

(3) ka-y-tfeṛṛez-u g ušnikkef (p. 53)

IMPP-3PL:IMPF-watch-3PL:IMPF in hedgehog:EA

‘They were watching the hedgehog.’

Other non-integrated elements in Colin’s text are the element ḍḥanana ‘our way’ (p. 52), and the Arabic active participles saktin ‘they are quiet’ maši ‘he is going’ (p. 54) found in present-day Ghomara as well.
There are some differences between old people and young people’s speech which show ongoing lexical replacement of Berber terms by their Arabic equivalents. When I told people that I wanted to research Berber, many speakers confronted me with the phrase isw = as, iyems = as ‘he covered the ground for him/her (for sleeping), he covered him/her (with a blanket)’. According to the speakers this is ‘real’ Berber as it was once used by previous generations. Nobody uses this anymore, instead the Arabic borrowed verbs iferrš = as, iyeṣṭṭy = as are used. Similarly, azel ‘to run’ was used up until recently by older speakers, but has now been replaced by żerri ‘to run’. Another example of replacement is ſum ‘to fast’ for zum ‘to fast’ which is still used by old people⁴. Another archaism is mtį ‘to eat lunch’. Many young and middle-aged people know this verb from the phrase hala a mtįt ‘come to eat lunch’. I was given the conjugational paradigm by a speaker of over 70 years of age. The normal verb used now is Arabic-morphology tyeddą ‘to eat lunch’. Examples of nouns are ayeľ ‘head’ which is replaced by the borrowing ddmaľ ‘head’, and azru ‘mill’, replaced by Arabic rrḥa ‘mill’.

The elements discussed above form integral parts of Ghomara Berber and therefore belong to the grammar of the language. Some other elements that occur are genuine code-switches with Arabic, and therefore are not an integral part of Ghomara Berber grammar (although they are of course an integral part of Iɛṛaben discourse). The line between code-switching and borrowing is drawn by the criterion of obligatoriness; I consider a code-switch as an Arabic element which is inserted in a specific linguistic or sociolinguistic context, but which remains optional. On the other hand, a genuine borrowing is part of the Ghomara Berber grammar itself. There are a number of contexts where the use of Arabic is obligatory. For example, within story-telling, the use of Berber and code-switched Arabic is regulated by clear-cut conventions. Normally the narrative parts of the story are told in Berber, but most of the conversations (depending on the story) are in Arabic. An example of a conversation is the following; the code-switched parts in Arabic are underlined:

(4) i-dda ašnikef iy uḡdi. i-nn = as: ‘šenni ya

3MS-go:Phedgehog:EL and jackal:EA 3MS-say:P = 3S:IO what FUT

The hedgehog and the jackal went. He said: ‘What are you going to take uncle
d-dębbbi a εemmį ddiḥ ka qlaeqlae ka herrefheref

2S:IMPF-take VOC uncle jackal Q roots Q leaves

⁴ Note that zum ‘to fast’ is also of Arabic origin, but a much older loanword (see Kossmann & van den Boogert, 1997).
jackal, the roots of the leaves?

He said: 'I was fooled'. He said: 'Now I am going to take qlaɛqlaɛ.'

The incidence of non-integrated borrowing in Ghomaran Berber is so high, and so pervasive in all realms of the grammar, that one regularly encounters utterances for which it is impossible to decide whether they are in Berber or in Arabic, as all the elements belong to both languages. When such sentences were embedded in Ghomaran Berber discourse, or, even more decisively, when they were produced while doing elicitation on Berber, I do not consider them code-switches. The following examples from texts are completely in Arabic and can not be uttered in any other way in Ghomara Berber.

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He said: ‘You fooled me last time, now I swear you will not fool me.’

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The incidence of non-integrated borrowing in Ghomaran Berber is so high, and so pervasive in all realms of the grammar, that one regularly encounters utterances for which it is impossible to decide whether they are in Berber or in Arabic, as all the elements belong to both languages. When such sentences were embedded in Ghomaran Berber discourse, or, even more decisively, when they were produced while doing elicitation on Berber, I do not consider them code-switches. The following examples from texts are completely in Arabic and can not be uttered in any other way in Ghomara Berber.
1.8. Is Ghomara Berber a mixed language?

It is clear that Ghomara Berber has undergone heavy lexical and grammatical influence from Arabic. The question then arises whether it can be classified as a mixed language (cf. Kossmann, 2013: 431). Mixed languages are the result of mixing of two languages to the extent where it is impossible to decide which language (family or group) it originated from. In other words, it is impossible to decide which is dominant language in the whole. For Ghomara, there are several criteria to classify it as a mixed language. As we saw earlier in the domain of the basic lexicon there is only slight dominance of Berber (2/3 vs. 1/3 in Swadesh 100); once a larger part of the lexicon is taken into account, Arabic is clearly dominant. There is strong convergence between Berber and local Arabic in phonology, which makes the two phonologies almost identical. Syntactically there is also strong convergence of Ghomara Berber and local Arabic. It is often impossible to decide which language has influenced the other on these levels. In the domain of the morphology the situation is more clear-cut; there are two parallel systems for all parts-of-speech: nouns, adjectives, verbs, pronouns (except for free and demonstrative pronouns, cf. chapter III.11.).

Within the prepositional phrase (chapter III.13.), the verbal complex (chapter IV.3.) and the relative clause (chapter IV.5.) both systems appear side by side, depending on the etymology.

Only in the noun phrase it is impossible to use a borrowed structure. Noun phrases have a Berber structure, whatever the etymology and morphology of the head noun, so that it is impossible to use a borrowed determiner in the noun phrase. The structure in (8) is Arabic and unacceptable in Ghomara Berber, which only allows for the Berber structure in (9):

(8)  had  l-mus
     S:PRX DEF-knife
     ‘this knife’

(9)  l-mus = ad
     knife = S:PRX
     ‘this knife’

An additional criterion which could argue against the mixed language hypothesis is that the morphological split is asymmetrical. As shown above, the distribution of the different
morphological systems is not strictly organised among etymological lines, in the sense that there are many words with Arabic etymology which have Berber morphology. On the other hand hardly any words with Berber etymology have Arabic morphology.

Taken together, Ghomara Berber qualifies as a language that shows strong similarities with mixed languages in that a large part of the lexicon and grammar have two different language sources. However, in the basic lexicon Berber is slightly more dominant and in the grammar the parallelism of the two languages is not complete. Taking into account the noun phrase, Berber is slightly more dominant. Ghomara Berber can therefore be qualified as a language that has undergone extreme borrowing resulting in mixing in multiple parts of the grammar.

1.9. The present grammar

This grammar follows the classical layout of a descriptive grammar. The phonology (chapter II), the morphology (chapter III) and syntax (chapter IV) are treated, followed by an appendix with three glossed and translated texts and an appendix with a Berber-English wordlist. As Ghomara Berber has been profoundly influenced by Arabic, Arabic grammar figures prominently in this book. Depending on the chapter, the borrowed Arabic component of the grammar is treated together with or separate from the Berber component.
II Phonology

In the two charts below the consonant phonemes of Ghomara Berber are displayed. The consonant phonemes between brackets are rare and occur mostly in borrowed words. Consonant phonemes (simple and geminate) are grouped together on the basis of their place of articulation.

1. Consonants

<table>
<thead>
<tr>
<th>Chart 1 Simple Consonants(^5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lab</td>
</tr>
<tr>
<td>-----</td>
</tr>
<tr>
<td>vcl. stop</td>
</tr>
<tr>
<td>vcd. stop</td>
</tr>
<tr>
<td>vcl. pha. stop</td>
</tr>
<tr>
<td>pha vcd. stop</td>
</tr>
<tr>
<td>vcl. fric.</td>
</tr>
<tr>
<td>vcl. phr. fric.</td>
</tr>
<tr>
<td>vcd. fric.</td>
</tr>
<tr>
<td>vcd. phr. fric.</td>
</tr>
<tr>
<td>vcl. affr.</td>
</tr>
<tr>
<td>vcd. affr.</td>
</tr>
<tr>
<td>approx.</td>
</tr>
<tr>
<td>tap</td>
</tr>
<tr>
<td>pha. tap</td>
</tr>
<tr>
<td>lat. approx.</td>
</tr>
<tr>
<td>pha.lat.approx.</td>
</tr>
<tr>
<td>nasal</td>
</tr>
</tbody>
</table>

---

\(^5\) lab = labial, interd = interdental, alv = alveolar, post-pal = post-alveolar, pal = palatal, vel = velar, lbd = labialised, uvu = uvular, phr = pharyngeal, pha = pharyngealised, lar = laryngeal, vcd. = voiced, vcl. = voiceless, lat = lateral, approx. = approximant
Like many other Berber languages the Ghomara consonant system has the typical contrastive features of voice, pharyngealisation and length (Kossmann 2012: 6, see Galand 2010: 49-59 who regards length as the result of tension). Most voiced consonants have a voiceless counterpart. All consonants distinguish length (in a few cases combined with another feature), which is used in morphophonological oppositions, especially in verbs.

Pharyngealisation occurs with alveolar consonants. Velar and uvular consonants oppose labialised versus non-labialised phonemes.

The relationship between (short) plosives and fricatives deserves special attention. In word-medial position, the plain continuants \( \text{b, t, d, k, k^w, g, g^w} \) are in phonemic opposition to their plosive equivalents. The plain continuants are the result of a process of spirantisation of stops which is a general development in the Northern Berber varieties (cf. Kossmann, 2012: 11-12). In word-initial and word-final position the phonemic contrast is neutralised to a large extent. In word-initial position there are only stops. In word-final position, stops occur in post-consonantal position while fricatives occur in post-vocalic position\(^6\). In intervocalic position the fricatives are more frequent. These are generalisations for which counter-examples exist. The geminate counterparts are always realised as plosives (except for marginal \( \text{g^g} \) which is only attested in the verb with the same form \( \text{g^g} \) ‘to do/ to make’).

---

\(^6\) In neighbouring Chefchaouen Arabic, spirantisation of stops occurs only in postvocalic position (cf. Moscoso 2002: 37-49).
Apart from the spirantised - occlusive pairs, there are two other simple - geminate consonant pairs which are irregular. The Aorist and the Imperfective forms are contrasted:

<table>
<thead>
<tr>
<th></th>
<th>Aorist</th>
<th>Imperfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>w &gt; ggʷ</td>
<td>zwir</td>
<td>zuggir</td>
</tr>
<tr>
<td>y &gt; qq</td>
<td>yems</td>
<td>qqems (~ yems)</td>
</tr>
</tbody>
</table>

'precede'

‘cover’

Below we will discuss each consonant separately. The major topics are: the status of the spirantised consonants, the status of the ġ and č and the semi-vowels. In separate paragraphs a summary of the distribution of spirantised consonants will be given. This will be followed by a brief discussion of the status of the geminates and the spread of pharyngealisation. In the section on the vowels, the diphthongs are presented and the behaviour of schwa is discussed. Separate paragraphs are dedicated to assimilations, elision of final consonants, vocalic sandhi and finally labialisation.

1.1. Labial and labiodental consonants

p [IPA: p]

This consonant is often found in loanwords from European languages, mostly from Spanish. In a few cases non-European words contain a p as well, such a iparparen ‘money’ lpeyrir ‘pan cake’, ṭṭawpa ‘rat’.

pp [IPA: p:]

This consonant is only found in medial position.
čappu ‘cap’

Distribution of b [IPA: b] ~ b [IPA: β]

In initial position b is prevalent over b. Very few instances of initial b exist, while examples of initial b are many.

berra  ‘outside’
baqi   ‘still’
bezzaf ‘many’
beṣri  ‘early’
berreḥ ‘call!’
bellareẓ ‘stork’
bactyaytna ‘between us’
bežžṭen ‘they trampled’
berrḏax ‘I made cold’
The few exceptions with initial ℓ are given below. These examples show that there is, marginally, a phonemic opposition in this position.

\[
\text{\textit{be}d\text{\textit{d}}\text{\textit{ax}}}
\]  
\text{‘I stood up’}

\[
\text{\textit{be}\textit{z}d\text{\textit{ax}} \sim \text{\textit{be}z\text{\textit{d}}\text{\textit{ax}}}
\]  
\text{‘I urinated’}

As for word-internal position, ℓ never occurs after l. Furthermore, there is a tendency for the b rather than ℓ to occur after t, although there are a few exceptions. Examples of words in which these sequences occur are:

\[
\text{\textit{lba}t\text{\textit{il}}}
\]  
\text{‘boat’}

\[
\text{\textit{lbir}}
\]  
\text{‘well’}

\[
\text{\textit{lbi}t}
\]  
\text{‘room’}

\[
\text{\textit{lb}ur\text{\textit{ka}}}
\]  
\text{‘pond’}

\[
\text{\textit{lbettix}}
\]  
\text{‘melon’}

\[
\text{\textit{lbibiru}}
\]  
\text{‘feeding bottle’}

\[
\text{\textit{itbae}bae}
\]  
\text{‘it bleats’}

\[
\text{\textit{itbe}lb\text{\textit{a}l}}
\]  
\text{‘he cuddles’}

\[
\text{\textit{tbuweh}}
\]  
\text{‘it mooed’}

There are a number of exceptions to these two generalisations, for example:

\[
\text{\textit{llba}y\text{\textit{t}}} 
\]  
\text{‘great-grandchildren’}

\[
\text{\textit{llba}c}
\]  
\text{‘sail, wind from the north’}

\[
\text{\textit{itberr\text{\textit{a}d}}}
\]  
\text{‘he makes cold’}

\[
\text{\textit{ket\text{\textit{bax}}}}
\]  
\text{‘I wrote’}

\[
\text{\textit{t\text{\textit{ba}c}}}
\]  
\text{‘follow’}

In most word-medial consonant clusters, the appearance of b or ℓ is unpredictable as shown in the examples below.

**first member of a consonant cluster:**

\[
\text{\textit{ddebli}z}
\]  
\text{‘bracelet’  vs.}

\[
\text{\textit{lge}bli}
\]  
\text{‘Jebli man’}
ssḇibṭaṯ ‘little shoes’ vs. teḇṭut ‘you divided’

ttṛbsil ‘plate’ vs. tabṣelt ‘onion’

second member of a consonant cluster:

ssbiya ‘paint’ vs. ssbeɛ ‘lion’

teqbex ‘I pierced’ vs. taqḇilt ‘village’

Intervocalically, b occurs more often and in fact intervocalic b is very rare. For example:

intervocalic b

iṣraḥen ‘village of Iraben’
tabekkiwt ‘worm’
taḥerquqt ‘prune’
taḥerṛikt ‘sheep’
tektābax ‘I am writing’

intervocalic b

itgabal ‘he keeps an eye on’
tibaṭaṭan ‘potatoes’

Word-finally b is found after a vowel. b is found after a consonant although the evidence for this is restricted to one example.

qelleḥ ‘to try’
iheṛreb ‘he made flee’
iseyyaḥ ‘he throws’
iṣṭeb ‘he asks to marry’
aṭerraḥ ‘stone’
lḥumb ‘side’

bb [IPA: b:] bbax ‘I took’; lḥebb ‘wheat’
1.2. Interdental and alveolar consonants

Distribution of t [IPA: t] and ṭ [IPA: θ]

Word-initially only the plosive pronunciation t occurs. In word-medial position both ṭ and t occur in the same environments. Therefore we assume a phonemic distinction between the two consonants in word-medial position. In word-final position the realisation is ṭ after a vowel and t after a consonant, although there are a few exceptions which have t after a vowel. Examples for each of the positions are:

initial t

taɛeddist
‘belly’
taɛeyyalt
‘girl’
tameṭṭut
‘woman’
tammart
‘beard’
tawfalt
‘egg’

medial t

ikteḇ
‘he wrote’
isten
‘it barks’
ftēh
‘open!’
atay
‘tea’
amekter
‘long wooden stick of the plough’
kafatira
‘kettle’

medial ṭ
The medial ṭ occurs intervocalically as well as adjacent to a consonant, for example:

\[
\begin{align*}
&\text{aṭebban} \quad \text{‘trousers’} \\
&\text{tlaṭa} \quad \text{‘three’} \\
&\text{ttiṭun} \quad \text{‘they go’} \\
&\text{ayeṭma} \quad \text{‘brothers’} \\
&\text{lexwaṭem} \quad \text{‘rings’} \\
&\text{sekṭax} \quad \text{‘I hushed’} \\
&\text{metqeḥ} \quad \text{‘chisel’} \\
&\text{lemṭac} \quad \text{‘property’} \\
&\text{tamṭunt} \quad \text{‘yeast’} \\
&\text{eemmṭiwaṭ} \quad \text{‘aunts’} \\
&\text{taṭilt} \quad \text{‘fuse’}
\end{align*}
\]

**Final ṭ**

\[
\begin{align*}
&təqbiṭt \quad \text{‘tribe’} \\
&tigdert \quad \text{‘ear (of wheat)’} \\
&təferkiwṭt \quad \text{‘small piece of land’} \\
&tawnaft \quad \text{‘baked bread’} \\
&tasefrawt \quad \text{‘yellow’} \\
&tafirast \quad \text{‘pear’} \\
&tayezdist \quad \text{‘rib’}
\end{align*}
\]

**Final ṭ**

\[
\begin{align*}
&tibṯ \quad \text{‘room’} \\
&lḥanuṭ \quad \text{‘shop’} \\
&taslaṭ \quad \text{‘bride’} \\
&tameṭṭuṭ \quad \text{‘women’} \\
&tāgayzuṭ \quad \text{‘calve’} \\
&məqqreṭt \quad \text{‘big (F./PL)’} \\
&tanebduṭ \quad \text{‘mowing season’} \\
&itmettaṭ \quad \text{‘he dies/is dying’}
\end{align*}
\]

**Post-vocalic Final ṭ**

In a few cases ṭ appears word-finally and postvocically (cf. III.1.3.2.)

\[
\begin{align*}
&tarḇaṭ \quad \text{‘girl’} \\
&təfriwet \quad \text{‘wing’}
\end{align*}
\]

---

\(^7\) Final -t following a vowel could have developed from geminate final -tt (cf. Penchoen, 1973: 13-14).
In the following two Arabic-morphology nouns, which form the plural by inserting a vowel before the final consonant, \( t \) changes to \( t \) in final position:

<table>
<thead>
<tr>
<th>SG</th>
<th>PL</th>
</tr>
</thead>
<tbody>
<tr>
<td>( lqent )</td>
<td>( leqnut ) 'corner'</td>
</tr>
<tr>
<td>( ššent )</td>
<td>( lešnat ) 'yoke for donkeys'</td>
</tr>
</tbody>
</table>

\( t > h \sim Ø \)

In some positions \( t \) becomes \( h \) or disappears completely.\(^8\) This only happens in subject prefixes on the verb, in third person direct object pronouns (masculine and feminine) and in the numeral ‘one’. The subject prefix \( t \)- on the verb regularly changes to \( h \sim Ø \) when followed by a \( t \) or \( tt \) (whether it is a Imperfective prefix or a verb stem consonant), for example:

Before the Imperfective marker \( tt- \sim t-\).

\( hetteftaf \sim tteftaf (\prec tetteftaf) \) ‘she is searching’
\( hteqqlet \sim teqqlet (\prec tteqqlet) \) ‘you return’
\( hettara \sim ttara (\prec tettara) \) ‘she writes’

Before a \( tt- \sim t-\) which is part of the verb stem.

\( hettru \sim ttru (\prec tettru) \) ‘she keeps on crying’

There is free variation between \( t \) and \( h \) in the subject prefixes of the Perfective. The subject prefixes are never reduced to zero. In similar context the prefix can be either \( t \) or \( h \), for example:

\( saca tedda \) ‘and then she went’
\( amḵ a hedda (\prec tedda) \) ‘when she went’
\( heqqim \) ‘she sat’

---

\(^8\) Laïkioui (2009: 109) notes for Senhaja de Srait: ‘L’élément \( t(e)p \) est en variation libre avec les formes spirantisées \( h(e)p \) et \( Ø-\) chez les Ayt Ktama, les Ayt Taghzut et les Ayt Bucibet (Rif occidental). La marque \( Ø-\) est aussi régulièrement attestée dans plusieurs variétés centrales.’
All subject prefixes with т in the Aorist disappear after a non-real marker (cf. IV.8.1.1.3.), e.g.

$i$ a ddu (i.e. $i$ a teddu)  ‘she will go.’
$i$ a ddut (i.e. $i$ a teddut)  ‘you will go.’

The direct object pronoun а is has a variant аh when preceding deictic clitic d / id (cf. III.11.2.1.).

tt  [IPA: tː]
tthawed ‘talk (to each other)!’; netta ‘he’; afatt ‘branch’

т  [IPA: tˤ]
аtIl ‘grapes’; атGam ‘yesterday’; ikemmEt ‘to burn’

There is a tendency in some speakers’ speech for т to become ḩ, after a vowel or a voiced consonant, for instance:

айффет > айффэд  ‘cattle’
lmuṭe > lmuḍə  ‘to a place’
baɛṭem > baɛḍəm  ‘to each other’
mriṭ > mriḍ  ‘ill’

тт  [IPA: tːː]
tṭmar ‘date’; ineṭhtar ‘he flies’; ṭṭett ‘suck’

Distribution of d [IPA: d] and ḩ [IPA: ð]

Initial position
Initial d and ḩ are not very frequent in Ghomara Berber. The few words that begin with either of these consonants have the stop, except for one verb.

Initial d

daxel  ‘inside’
deydaḵ  ‘earlier’
daʔimen  ‘always’
dhaḍiṇet  ‘here’
das  ‘there’
Medial d appears in consonant clusters as well as intervocally. After r and n mostly d is found, although after r there are a few exceptions where d and ŏ are in free variation.

Intervocalic d is rare, one normally finds ŏ. All instances of intervocalic d are listed below. Medial d adjacent to a consonant and intervocalic d are also presented. Sometimes there is free variation in intervocalic position. In final post-consonantal position d appears, whereas fricative ŏ appears in postvocalic position. However, there are a few exceptions.

**medial d adjacent to a consonant**

<table>
<thead>
<tr>
<th>Word</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>deydak</td>
<td>‘earlier’</td>
</tr>
<tr>
<td>mēdum</td>
<td>‘ill’</td>
</tr>
<tr>
<td>lferdi</td>
<td>‘gun’</td>
</tr>
<tr>
<td>lkebdá</td>
<td>‘liver’</td>
</tr>
<tr>
<td>isardunen</td>
<td>‘mules’</td>
</tr>
<tr>
<td>issendaw</td>
<td>‘he churns’</td>
</tr>
<tr>
<td>edel</td>
<td>‘make!’</td>
</tr>
<tr>
<td>itdeḡdaḡ</td>
<td>‘he crushes’</td>
</tr>
<tr>
<td>zdu</td>
<td>‘under’</td>
</tr>
<tr>
<td>ageždir</td>
<td>‘green lizard’</td>
</tr>
</tbody>
</table>

**intervocalic d**

<table>
<thead>
<tr>
<th>Word</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>lbidu</td>
<td>‘bucket’</td>
</tr>
<tr>
<td>abdidu</td>
<td>‘small bucket’</td>
</tr>
<tr>
<td>lebradeed</td>
<td>‘saddles’</td>
</tr>
<tr>
<td>tamezgida (~ tamezgiḏa)</td>
<td>‘mosque’</td>
</tr>
<tr>
<td>adideḡ</td>
<td>‘mortar’</td>
</tr>
</tbody>
</table>

**medial ḏ adjacent to a consonant**

<table>
<thead>
<tr>
<th>Word</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>aḡdi</td>
<td>‘jackal’</td>
</tr>
<tr>
<td>Word</td>
<td>Meaning</td>
</tr>
<tr>
<td>------</td>
<td>---------</td>
</tr>
<tr>
<td>tamda</td>
<td>‘pond’</td>
</tr>
<tr>
<td>qdim</td>
<td>‘old’</td>
</tr>
<tr>
<td>adfel</td>
<td>‘snow’</td>
</tr>
<tr>
<td>adyes</td>
<td>‘colostrum’</td>
</tr>
<tr>
<td>lqaeda</td>
<td>‘part of the plough’</td>
</tr>
<tr>
<td>tafdent</td>
<td>‘toe’</td>
</tr>
<tr>
<td>ttaqda</td>
<td>‘I pee’</td>
</tr>
</tbody>
</table>

**Intervocalic ḏ**

<table>
<thead>
<tr>
<th>Word</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>thaṭin</td>
<td>‘this one (F.)’</td>
</tr>
<tr>
<td>taxaḍemt</td>
<td>‘ring’</td>
</tr>
<tr>
<td>mnaḍem</td>
<td>‘man/person’</td>
</tr>
<tr>
<td>taḍunt</td>
<td>‘fat’</td>
</tr>
<tr>
<td>aḍem</td>
<td>‘blood’</td>
</tr>
<tr>
<td>iḍes</td>
<td>‘with hem/her’</td>
</tr>
<tr>
<td>tamuda</td>
<td>‘sow’</td>
</tr>
</tbody>
</table>

**Final d**

<table>
<thead>
<tr>
<th>Word</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>issend</td>
<td>‘he churned’</td>
</tr>
<tr>
<td>ayižd</td>
<td>‘billy goat’</td>
</tr>
<tr>
<td>aṭuḡd</td>
<td>‘finger’</td>
</tr>
<tr>
<td>ṣṣehd</td>
<td>‘heat’</td>
</tr>
<tr>
<td>lġeld</td>
<td>‘skin’</td>
</tr>
<tr>
<td>lqird</td>
<td>‘monkey’</td>
</tr>
</tbody>
</table>

**Final ḏ**

<table>
<thead>
<tr>
<th>Word</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>lberraḍ</td>
<td>‘tea pot’</td>
</tr>
<tr>
<td>uḥaḍ</td>
<td>‘this one (msc.)’</td>
</tr>
<tr>
<td>ihṣed</td>
<td>‘he envied’</td>
</tr>
<tr>
<td>ciḍ</td>
<td>‘still’</td>
</tr>
<tr>
<td>seqqed</td>
<td>‘release (goats)’</td>
</tr>
<tr>
<td>iheddeḍ</td>
<td>‘he threatens’</td>
</tr>
<tr>
<td>ayed</td>
<td>‘ash’</td>
</tr>
<tr>
<td>elqrud</td>
<td>‘monkeys’</td>
</tr>
<tr>
<td>leḏluḍ</td>
<td>‘skins’</td>
</tr>
<tr>
<td>aẓebbad</td>
<td>‘elastic’</td>
</tr>
<tr>
<td>afuḍ</td>
<td>‘knee’</td>
</tr>
</tbody>
</table>
There are a few exceptions, which have d postvocally.

lwalid ‘father’
zzrud (~ zruḍ) ‘feast meals’
lʔaždad ‘ancestors’

dd [IPA: dː]
dder ‘be alive’; medden ‘people’; lhedd ‘border, sunday’

The dd in the verb ddu ‘to come’ can become a single d between vowels and after the deictic clitic d ‘hither’.

a d idu ‘he will come’

ɖ [IPA: dʕ]
The consonant ɖ is very rare. In certain cases it is a free variant of ţ. In words such as ayerḍay ‘mouse’ and izzaḍ ‘he grinds’ (I) it could be a result of the spread of pharyngealisation. An example is:
taḍūtt ‘wool’

In some words ɖ and d are in free variation, for example:
hḍi ~ ḥḍi ‘keep an eye on’
ṛṛemḍan - ṭṛṛemdan ‘ramadan’

dd [IPA: dː]
ɖd is very rare. Apart from ḥeddi ~ ḥeddī ‘he keeps an eye on’ which are in free variation, only the following noun and verb in our corpus have this geminate consonant.
tidda ‘leech’; meddi ‘to sharpen’

ɖ [IPA: dʕ]
This phoneme is not found in word-final position.
dess ‘laugh’; lweṛḍa ‘a rose’

dd [IPA: dː]
This phoneme is restricted to three instances in our corpus:
ddbae ‘jackal’; feḍdi ‘finish!’; lyeddar ‘traitor’
n [IPA: n]
anas ‘sparkle’; afenṭuṭ ‘lip’; ihessen ‘he shaved’

nn [IPA: n:]
nnan ‘they said’; genna ‘sky’; inn ‘he said’

s [IPA: s]
asif ‘river’; tasa ‘cow’; iles ‘tongue’

ss [IPA: s:]
assa ‘nowadays’; ihesseb ‘he counts’; iciss ‘to guard’

š [IPA: s̱]
šum ‘fast!’; šuşef ‘spit!’; ixelles ‘he payed’

šš [IPA: s̱ː]
ššebbat ‘shoes’; anessab ‘piece of iron on which bait is put’; lgesš ‘big floor’

z [IPA: z]
zebbel ‘curse!’; azar ‘fur’; krež ‘plough!’

zz [IPA: zː]
zzuɣur ‘pull!’; rezzwan ‘they delouse’; ihezz ‘he shook’

ʒ [IPA: z̺]
ʒum ‘fast!’; azar ‘root’; illuz ‘he is hungry’

ẓẓ [IPA: z̺ː]
ᵦfɛẓẓet ‘he cut open’; ᵦɪzzar ‘he sees’; afazẓ ‘edible part of doum leaf’

1.3. Post-alveolar consonants

š [IPA: ʃ]
ašqef ‘snail shell’; taxšēbt ‘trap’; ieš ‘he lived’

šš [IPA: ʃː]
ššestar ‘hair’; šš ‘eat!’; irešš ‘he splashed’
č [IPA: tʃ]

This consonant is quite rare. Most often it appears in Spanish loanwords and in onomatopoeia. We consider it a phoneme on its own, as there is one verb which shows its use in a morphophonological opposition, namely the Imperfective formation. Many verbs form the Imperfective by geminating the second consonant of the Perfective (cf. paragraph 7.6.1.2. for this type of Imperfective formation). Compare the Perfective and the Imperfective forms of the verb ḵšem ‘to enter’.

<table>
<thead>
<tr>
<th>P</th>
<th>I</th>
</tr>
</thead>
<tbody>
<tr>
<td>ɪ̠kšem ‘he entered’</td>
<td>ɪkečem ‘he always enters’</td>
</tr>
</tbody>
</table>

There is no phonetic difference between the č in the verb above and č in the following nouns.

čeppuxa ‘balloon’ aḥečun ‘vagina’, llḥač ‘hot rain, sail’

The phonetically same sound tš can be the result of a sequence of t + š, for example in the derived form tšaq ‘be split’ or in ḥetšax ‘I have fetched the grass’ which is the first person singular form of ḥteš ‘to fetch grass’. In this case tš is written instead of č.

The Arabic article does not assimilate to the č of Arabic-morphology nouns, for example:

lčabula ‘shed’
lčuppa ‘lollipop’
lčimineyya ‘chimney’
lčerqun ‘filth on the skin’

ž [IPA: ʒ]

ižni ‘he picked’; lḥaža ‘thing’; afeṛṛuž ‘rooster’

The phoneme ž changes to ġ when following l, n or r. With one exception in our corpus, ž is always realised as ġ following the Arabic article l. The article does not assimilate to the consonantº. Examples of ġ are:

lğeɛda ‘carrot’
lğeld ‘skin’
lğmel ‘camel’

º In many varities of Moroccan Arabic the article assimilates to the żż (cf. Heath 2002: 169).
There are a few exceptions, especially after r and very rarely after l and n¹⁰.

We also find a few instances of ġ following ḥ and w¹¹.

The following singular - plural pairs show that ġ alternates with ž in forms where there is no direct contact with the triggering consonant.

<table>
<thead>
<tr>
<th>SG</th>
<th>PL</th>
</tr>
</thead>
<tbody>
<tr>
<td>lǧumb</td>
<td>ležnaḇ</td>
</tr>
<tr>
<td>lǧlaleḇ</td>
<td>ažellaḇ</td>
</tr>
<tr>
<td>lǧim</td>
<td>ležyam</td>
</tr>
<tr>
<td>amenǧuṛ</td>
<td>lemnąžer</td>
</tr>
<tr>
<td>lǧduḏ</td>
<td>žeddi</td>
</tr>
</tbody>
</table>

An unexplained occurrence of ġ is found in the verb ḡerger ‘glide/drag along the ground’ which corresponds to źeržer ‘glide/drag along the ground’ in Moroccan Arabic (Harrell, 1966:236). The initial ġ could be a geminate counterpart of ž. The second second ġ follows an r. Another case is the collective noun lğuget ‘walnut’ in which the second affricate corresponds to ž as shown by the unity noun tažužet ‘a walnut’. In the case of the active participle forms maži / mağa (~ mažža) / mağin (~ mažžin) ‘come’ the ġ can be explained as a realisation of underlying žy.

¹⁰ Compare Anjra Arabic (Vicente 2000:45) for a similar situation.
¹¹ In Chefchaouen Arabic ġ also occurs when following n, d, ḥ, y, ṡ, f (Moscoso, 2002:43).
There is free variation between ź and ġ in a limited number of instances, for example:

\[težb ~ teğb\]  
\('he liked her'\)

ġ [IPA: dʒ]

\(iğun\) ‘he has eaten enough’; \(weğeḍ\) ‘prepare’; \(iğ\) ‘he left’

Some instances of ġ correspond to źź. In the first place, the verb ġ ‘to let/leave’ has optional deaffrication. Deaffrication only takes place at the end of an utterance or before a consonant, for example:

\[š  a   y=ne-žž   dar  ššbeh\]
\(\text{FUT AD 3MS:DO=3MS-leave:A until morning}\)

‘We will leave him until the morning.’

Compare also the following example of the second singular Perfective form and the third person masculine singular form which is in final position and is deaffricated.

\(2S 3MS\)

\(teğat ‘you left’ iżž ‘he left’\)

Furthermore, deaffrication is found as a variant of the second person masculine independent pronoun when it is the final consonant (see III.11.1).

\(keği(n) keżž ‘you’ ‘you’\)

In Arabic loans, Ghomara ġ often corresponds to źź in other variants of Moroccan Arabic, e.g.

**Ghomara Mar. Arab.**

\(leqmiğa leqmižža \) (Harrell, 1966:109) ‘shirt’

\(lhağ lhažž \) (Harrell, 1966:251) ‘pilgrim’

\(tuğar tužžar \) (Harrell, 1966:163) ‘merchant, wealthy man’

In the following verb pairs ź and ġ are opposed. In the first example the second verb is derived from the first verb by gemination of the second consonant (Arabic stem II). The
second and third example show the difference between Perfective and Imperfective verb pairs. In the Imperfective the first consonant is geminated yielding the affricate ꙇ\textsuperscript{12}.

<table>
<thead>
<tr>
<th>P</th>
<th>I</th>
</tr>
</thead>
<tbody>
<tr>
<td>wżeḏ</td>
<td>iweḏeq</td>
</tr>
<tr>
<td>ižreḥ</td>
<td>iğruḥ</td>
</tr>
<tr>
<td>ižmeɛ</td>
<td>iğmuc</td>
</tr>
</tbody>
</table>

The consonant ṭž in for example the t- derived form ṭzewwi ‘be wrapped up’ is phonetically the same as ꙇ but is not considered the same consonant.

There is no length difference between the allophone ꙇ of ṭ and the phoneme ꙇ which corresponds to ẓẓ in other variants of Moroccan Arabic\textsuperscript{13}. Therefore there are two phonemes: ẓ and ꙇ.

We found only one invariable instance of ẓẓ in our corpus (IPA: ʒː) which is not the result of deaffrication of ꙇ, namely ɓezzet ‘to trample on’.

1.4. Lateral and rhotic consonants

r [IPA: r]

argaz ‘man’; yura ‘he wrote’; kkur ‘stand up’

rr [IPA: rː]

rri ‘bring back’; berrdax ‘I froze’; taḥerriwt ‘animal dropping’

r [IPA: r']

rebbi ‘raise!’; lešfar (n tiwan) ‘eyelids’; amaṛ ‘send’

rr [IPA: rːʃ]

rrmel ‘sand’; seṛṛden ‘they sent’; aḥeṛṛey ‘ram’

\textsuperscript{12} This is not the result of an assimilation of imperfective tt ~ t with ṭ. This is a regular morphological Imperfective formation which geminates the first consonant and inserts u before the final consonant.

\textsuperscript{13} El Hannouche’s data show that there are more exceptions in Amṭiqan with regards to the ṭ. In his texts (2010:177-242) we find for example lželd, lžemca, lžiran, but also (e)lgri. Furthermore, we find amenžur (273) and nžum (65). The phoneme ꙇ is never realised as ṭẓ as in aheğal (65), keḡ (113) and aḡar (235).
l [IPA: l]
iles ‘tongue’; alum ‘hay’; ikemmel ‘he finished’

In a few cases there is free variation between l and r, for example:

tilkan ~ tirkan ‘head louse’
tilkaman ~ tirkaman ‘kind of spinach’
pulpu ~ purpu ‘octopus’ (< Spanish)

ll [IPA: lː]
lluẓ ‘be hungry!’; mellken ‘they marry’; ggull ‘swear’

The pharyngealised lateral l [IPA: lː] does not occur on its own in non-pharyngealised contexts. The geminate ll [IPA: lːː] is only found in words containing alla ‘God’ such as stayfīrualla ‘may God forgive’, wella ‘I swear’ and yalla ‘come on’.

1.5. Velar consonants

Distribution of k [IPA: k] and ḵ [IPA: x]
The consonants k and ḵ have the same place of articulation, in the front-velar/mid-velar range; ḵ is thus quite different from the palatal fricative ç found, for instance, in Tarifiyt and in Kabyle Berber. The consonant k is found more often than ḵ in initial position. The examples enumerated below are all the words beginning with ḵ in our corpus.

initial k
kelwa ‘kidney’
kelma ‘word’
kueballa ‘female jackal’
kursi ‘chair’
kamlin ‘all (PL)’
kreh ‘hate!’
keği ‘you (M:SG)’
kerkeḇ ‘roll!’

initial ḵ
kma ‘my brother’
кра ‘some’
krez ‘plough!’
In word-medial environments, both ƙ and ƙ can occur, both intervocally and in pre- and postconsonantal position, for example:

**medial ƙ**

<table>
<thead>
<tr>
<th>Word</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>tilket</td>
<td>‘louse’</td>
</tr>
<tr>
<td>ilkem</td>
<td>‘he entered’</td>
</tr>
<tr>
<td>tiskert</td>
<td>‘garlic’</td>
</tr>
<tr>
<td>ƙun</td>
<td>‘who’</td>
</tr>
<tr>
<td>tirkila</td>
<td>‘bitches’</td>
</tr>
<tr>
<td>muškil</td>
<td>‘problem’</td>
</tr>
<tr>
<td>akerkur</td>
<td>‘stone heap’</td>
</tr>
<tr>
<td>sakeṭ</td>
<td>‘quiet’</td>
</tr>
<tr>
<td>akeḥlaw</td>
<td>‘black (person)’</td>
</tr>
</tbody>
</table>

**medial ƙ**

<table>
<thead>
<tr>
<th>Word</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>melken</td>
<td>‘they married’</td>
</tr>
<tr>
<td>tilkaman</td>
<td>‘type of spinach’</td>
</tr>
<tr>
<td>ssḵemt-awet</td>
<td>‘burn!’ (PL)</td>
</tr>
<tr>
<td>akenniw</td>
<td>‘twins’</td>
</tr>
<tr>
<td>tafuḵt</td>
<td>‘sun’</td>
</tr>
<tr>
<td>lmakla</td>
<td>‘food’</td>
</tr>
<tr>
<td>aḵal</td>
<td>‘soil’</td>
</tr>
<tr>
<td>beḵri</td>
<td>‘early’</td>
</tr>
<tr>
<td>aḵmez</td>
<td>‘nail’</td>
</tr>
<tr>
<td>aḵemmar</td>
<td>‘face’</td>
</tr>
<tr>
<td>imuḵar</td>
<td>‘thieves’</td>
</tr>
</tbody>
</table>

In word-final position, ƙ occurs after a vowel (including schwa) and ƙ after a consonant. A singular - plural pair like lmilk ‘possession’ amlaḵ ‘possessions’ shows this alternation.

**final ƙ**

<table>
<thead>
<tr>
<th>Word</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>ʈʈaḥk</td>
<td>‘laughter’</td>
</tr>
<tr>
<td>ifk</td>
<td>‘he gave’</td>
</tr>
<tr>
<td>iwešk</td>
<td>‘he got lost’</td>
</tr>
<tr>
<td>aṭužk</td>
<td>‘male partridge’</td>
</tr>
<tr>
<td>sselk</td>
<td>‘iron wire’</td>
</tr>
</tbody>
</table>
There are a few exceptions in our corpus with final postvocalic k:

\[
\begin{align*}
\text{lplaštik} & \quad \text{‘plastic’} \\
\text{hak} & \quad \text{‘here!’} \\
\end{align*}
\]

**final ƙ**

\[
\begin{align*}
\text{deydaƙ} & \quad \text{‘earlier’} \\
\text{lmalîk} & \quad \text{‘king’} \\
\text{nneƙ} & \quad \text{‘yours’} \\
\text{itƙerrak} & \quad \text{‘he lies’} \\
\text{haɗik} & \quad \text{‘that’} \\
\text{aʂרik} & \quad \text{‘farmer’s assistant’} \\
\text{aɓeddiƙ} & \quad \text{‘rooster’} \\
\end{align*}
\]

**ƙw [IPA: kʷ]**

Labialised kʷ is only found in the Aorist form of the verb /lkʷem / [lkum] ‘arrive, reach’ and the derived form /sselkʷem/ [sselkum] ‘make arrive, reach’ (see IV.3.2.1.1. on the causative prefix).

**ƙw [xʷ]**

Labialised kʷ is found, among others, in takʷ“mamt ‘muzzle’ and the Aorist of the verb aƙur (/aƙʷer/) ‘steal’.

**kk [IPA: k:]**

Geminate kk stands in morphophonological opposition to k in ilkem ‘he arrived’ - ilekkem ‘he arrives’ as well as to ƙ, e.g. in iknes ‘he argued’ - ikknes ‘he argues’. ikkres ‘he ploughs’; ilekkem ‘he arrives’; ḥekk ‘scratch’

**kkʷ [IPA: k:ʷ]**

Labialised kkʷ is only found in the Aorist forms of the verbs kkur /kkʷer/ ‘get up!’; ukkr-awεt /kkʷer-awεt/ ‘get up!’ (PL) and kkus /kkʷes/ ‘remove!’ - ukks-awεt /kkʷs-awεt/ ‘remove!’ (PL).

**Distribution of g [IPA: g] and ĝ [IPA: ɣ]**

Like k and ƙ, the consonants g and ĝ have front-velar to mid-velar pronunciation. The consonant ĝ therefore has a different pronunciation from ĝ in other Berber languages, such
as Kabyle and some Tarifiyt varieties, which is a voiced palatal fricative [ʝ]. Word-initially only g is attested, as in the following examples.

**initial g**

- *genna* ‘sky’
- *gum* ‘in front of’
- *gas* ‘in it’
- *gatri* ‘bed’
- *geṛṛu* ‘cigarette’
- *gales* ‘seated’
- *gewwez* ‘pass!’
- *gewweḏ* ‘lead!’

In medial position both g and ḡ are attested adjacent to both vowels and consonants. When following alveolar consonants l, r, t, n, z the stop g is more frequent than fricative ḡ. In some words, there exists free variation between g and ḡ, notably when following ŏ and ṭ, e.g. *aṭgam* ~ *aṭḡam* ‘yesterday’ and *tazga* ~ *taẓga* ‘forest’.

**medial g**

- *targa* ‘canal’
- *angi* ‘rain water’
- *lgebš* ‘gypsum’
- *azgaznet* (~ *azgʷaznet*) ‘two years ago’
- *imezgan* ‘ears’
- *tageržumt* ‘adam’s apple’
- *agamgam* ‘big rock’
- *lemnagež* ‘earrings’
- *ngi* ‘push!’
- *ageyyar* ‘tree stump’

**medial ḡ**

- *aḡdi* ‘jackal’
- *aḡṭi* ‘bird’
- *taḡiḡet* ‘tree’
- *aḡellu* (awellu) ‘plough’
- *taḡursa* ‘ploughshare’
- *aṭuḡd* ‘finger’
- *taḡnawt* ‘pumpkin’
aseğnu

The noun aģellu ‘plough’ has a free variant awellu. It is reported by informants that in Beni Mensour the noun tağiğet ‘tree’ is pronounced tawiğet.

In final position g and ḡ are not very frequent. There is a preference for ḡ in final postvocalic position, while after a consonant there is always g.

**final g**

<table>
<thead>
<tr>
<th>Term</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>lbergag</td>
<td>‘traitor’</td>
</tr>
<tr>
<td>izegseg</td>
<td>‘it mated’</td>
</tr>
<tr>
<td>čerrag</td>
<td>‘tear apart!’</td>
</tr>
<tr>
<td>sennig</td>
<td>‘above’</td>
</tr>
<tr>
<td>werg</td>
<td>‘dream’</td>
</tr>
<tr>
<td>lferg</td>
<td>‘swarm of birds’</td>
</tr>
</tbody>
</table>

**final ḡ**

<table>
<thead>
<tr>
<th>Term</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>ideḡdeḡ</td>
<td>‘he crushed’</td>
</tr>
<tr>
<td>nteḡ</td>
<td>‘fly!’</td>
</tr>
<tr>
<td>amezzuḡ</td>
<td>‘ear’</td>
</tr>
<tr>
<td>ibzeg</td>
<td>‘he moisted’</td>
</tr>
<tr>
<td>izzeg</td>
<td>‘he milked!’</td>
</tr>
<tr>
<td>adideḡ</td>
<td>‘mortar’</td>
</tr>
<tr>
<td>afraq</td>
<td>‘fence’</td>
</tr>
<tr>
<td>azzuḡ</td>
<td>‘wetness’</td>
</tr>
</tbody>
</table>

**gʷ [IPA: gʷ]**

This consonant is among others found in the diminutive noun tagʷsisert ‘small downwards slope’ and in agʷlaf ‘bee swarm’.

**ḡʷ [IPA: ɣʷ]**

This consonant is found in the Aorist verb form nezzuḡ (/neżzeḡʷ/) ‘we milked’ and in the Aorist form nsaḡum (/nsaḡʷem/) ‘we will wait’.

**gg [IPA: gː]**

In verbs there is a morphophonological opposition between g - gg as in ingi ‘he pushed’ and ineggi ‘he pushes’. cf. also iggez ‘he descended’.
\textbf{gg" [IPA: \textipa{g:\textipa{w}}]} \\
This shows up in \textit{inugg} (/\textipa{inegg\textipa{w}}/) ‘it is cooking’ where it is the geminate of \textit{w}, and also in the Aorist form \textit{gguz} (/\textipa{gg\textipa{w}ez} /) ‘descend!’.

\textbf{ḡḡ [IPA: \textipa{yy}]} \\
There is one instance of geminate \textit{ḡḡ} in Ghomara. The \textit{ḡḡ} in this word can become \textit{ww}, \textit{teḡḡet} \textgreater{} \textit{tewwet} ‘you did’. This consonant does not have a labialised counterpart.
\begin{itemize}
\item \textit{ḡḡ} \hspace{1cm} ‘do, make’
\end{itemize}

\textbf{Lenition} \\
In some verbs and nouns the consonant \textit{gg"} and \textit{gg} are in free variation with \textit{ḡ} and \textit{k} intervocalically. For example:

\begin{itemize}
\item \textit{aggez} \textasciitilde{} \textit{uggez} ‘recognise!’ \hspace{1cm} > \textit{š a y nuḡuz} / \textit{š a y nukeit} ‘we will recognise him.’
\item \textit{gguz /gg\textipa{w}ez/} ‘go down!’ \hspace{1cm} > \textit{ss-ugez / ss-ukeit} ‘make go down!’
\item \textit{tiggura} \textasciitilde{} \textit{tiḡura} ‘doors’
\end{itemize}

\textbf{1.6. Semi-vowels} \\

\textbf{y [IPA: j]} \\
\textit{ayaw} ‘grandchild’; \textit{taryalt} ‘basket’; \textit{amaẓay} ‘canine tooth’

In sequences of two high vowels \textit{i} and \textit{u} in initial position the result is free variation between \textit{yu} and \textit{iw} for example:

\begin{itemize}
\item \textit{yuḡel} \textasciitilde{} \textit{iwḡel} ‘he hung’
\item \textit{yuki (yuṅa)} \textasciitilde{} \textit{iwka} ‘he crossed (the water)’
\end{itemize}

\textbf{yy [IPA: j:]}
The semi-vowel \textit{yy} is only found in word-medial position. \textit{seyyeḇ} ‘throw!’ ; \textit{keyyel} ‘weigh!’

\textbf{w [IPA: w]} \\
\textit{weṛṛeḵ} ‘lie down!’; \textit{ittawi} ‘he brings’; \textit{aḡnaw} ‘big pumpkin’

The geminate correspondent of \textit{w} can be \textit{gg"}, for example in \textit{rwel} (P) - \textit{ruggel} (I) /\textipa{regg\textipa{w}el}/ ‘to flee’. However, there are other verbs which have \textit{ww} as the geminate correspondent, for example the verb \textit{xwi} (P) - \textit{xewwi} (I) ‘to empty’. 

35
**ww [IPA: w:]**
The semi-vowel **ww** is only found in medial position.

*xewwef* ‘frighten’; *aṭewwiš* ‘rain-pipe’

### Behaviour of semi-vowels

When in contact with schwa, the semivowel **w** can in some positions be realised as /u/, compare for example the following forms of the same verb:

- **nuyel ~ newyel** ‘we are trapped.’
- **ittewsir ~ ittusir** ‘he is becoming old’
- **lewqit ~ luqit** ‘matches’
- **š a sut / š a swet** ‘you will drink’
- **ttun ~ ttwen** ‘they forgot’

In final position **ew** and **u** are neutralised, and are both realised as **u**. For example:

- **š a nu (< š a ssnew)** ‘it will be cooked’
- **š a ttu (< š a ttew)** ‘he/she will forget’
- **š a su (< š a sew)** ‘he/she will drink’

Similarly, the difference between **i** and **ey** is neutralised in favour of **i** in final position, e.g.

- **ittawi** ‘he takes’

There is free variation between the form between **ey** and **i** when followed by a suffix, e.g.

- **ttawyen ~ ttawin** ‘they take’

Not all final **i**’s are the result of the neutralisation of **ey**, for example:

- **tunim ** *tunyem** ‘you (PL) mounted’

In the morphology, for example in the formation of the Imperfective of the causative, the original semivowel reappears when following a plain vowel, e.g.

<table>
<thead>
<tr>
<th>Aorist</th>
<th>Imperfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>ss[ku]</td>
<td>ss[kaw]</td>
</tr>
<tr>
<td>ss[nu]</td>
<td>ss[naw]</td>
</tr>
<tr>
<td>sseḥm[u]</td>
<td>sseḥm[aw]</td>
</tr>
</tbody>
</table>
There is free variation between **yu** and **iw** when the **i-** subject prefix and **u** collide, for example:

- **yuf ~ iw**
  - ‘he found’
- **yulu ~ iwlu**
  - ‘he picked (fruit)’

### 1.7. Back-velar and uvular consonants

**\(x\) [IPA:χ]**

The consonant **\(x\)** is a back-velar fricative, tending towards the uvular domain. It is never confused with the velar fricative **\(k\)** (IPA: [x]).

- **ixebbeɛ** ‘he has stored’;
- **nnexla** ‘date palm tree’;
- **fsex** ‘untie!’

**\(x^w\) [IPA:χʷ]**

This consonant appears only in /\(tax^w\)est/ which has realisations [taxust] and [ta"xest] and in **\(tax^w\)raft** ‘riddle, story’.

- **\(xx\) [IPA:χː]**
  - **taxxunt** ‘ass’;
  - **aduxxan** ‘chimney’;
  - **lfexx** ‘bird trap’

**\(γ\) [IPA:γ]**

The consonant **\(γ\)** is a back-velar fricative, tending towards the uvular domain. It is never confused with the velar fricative **\(g\)** (IPA: [γ]). This consonant is in morphophonological opposition to **\(qq\)**, e.g. in the verb **\(iyres\)** ‘he slaughtered’ - **\(iqqres\)** ‘he slaughters’.

- **\(γres\)** ‘slaughter!’;
- **\(adyes\)** ‘colostrum’;
- **\(idey\)** ‘heap of grain’

**\(γ^w\) [IPA:γʷ]**

A number of nouns exist that have labialised **\(γ^w\)**. It is not found in initial position.

- **\(tizγ^w\)al** ‘ladles’;
- **\(ffγ^w\)uy** (/ffeγʷ/ ‘go out!’

**\(q\) [IPA:q]**

- **\(qurar\)yes** ‘type of insect’;
- **\(aqezzun\)** ‘dog puppy’;
- **\(felleq\)** ‘cut in two pieces!’

**\(qq\) [IPA:qː]**

- **\(iqqres\)** ‘he slaughters’;
- **\(taweqqaf\)t** ‘door jamb’;
- **\(lheqq\)** ‘right’
qqʷ [IPA: qʷ]
This phoneme occurs in the adjective ‘be big’, e.g. masculine meqqur
/meqqʷer/, feminine/plural muqqret /meqqʷet/. Furthermore, the Aorist of a number of verbs have qqʷ e.g. qqul /qqʷel/ ‘return!’ uqql-awet /qqʷl-awet/ ‘return!’ (PL) and qqun /qqʷen/ ‘tie!’ uqqn-awet /qqʷn-awet/ ‘tie!’ (PL).

1.8. Pharyngeal and laryngeal consonants

ɛ [IPA: ʕ]
euryan ‘naked’; taɛeddist ‘belly’; ixellec ‘he preserved meat’

ɛɛ [IPA: ʕː]
This consonant is not found in initial or final position.
beɛɛeḏ ‘go away!’; aبهɛɛiš ‘lamb’; ṭɛɛɛɛ ‘make shiver’

ḥ [IPA: ħ]
henni ‘stoop!’; ahɛɛɛɛɛɛ ‘tall man’; ṭɛɛɛɛ ‘air’

ḥḥ [IPA: hh]
This consonant is not found in initial or final position.
imɛɛɛɛ ‘he erases’; seḥḥun ‘they get well’

h [IPA: h]
herreb ‘make flee!’; taheḡalt ‘widow’; neddeh ‘drive, guide!’

hh [IPA: hː]
This consonant is not found in initial or final position.
ifehhem ‘he explains/makes understand’ dehhef ‘make appear!’ tehhef ‘circumcise!’

ʔ [IPA: ʔ]
This consonant only occurs in borrowings from Standard Arabic, for example:
tʔekked ‘verify!’ daʔimen ‘always’
1.9. Status of geminate consonants

Geminate consonants have two sources; they can be the result of assimilations or they are lexically determined\(^{14}\). Geminates have more muscular force associated with them and as a result are generally longer that their simple counterparts. Their status is determined by being contrastive with simple consonants (cf. Galand, 2010:499-59). Geminates are considered monophonemic as they cannot be split up by schwa insertion. In the first example \(\text{qq}ln\) can not be split by schwa as would be expected if it behaved as two consonants (compare \(\text{kešmen}\) ‘they entered’).

\[
\text{qq}ln > \text{qq}len (*\text{qeqlen}) \quad \text{‘they returned’}
\]

However, they behave differently from single consonants. A geminate can have schwa’s on both sides, behaving like two consonants: the coda of one syllable and the onset of the next syllable.

\(\text{teqqel}\) ‘she returned’

Geminates are neutralised in final pre-pausal position. They become simple (non-geminate) consonants. In non-final environments the geminate surfaces again. In initial and medial position there is no neutralisation. Final geminates are always written with two consonants. Some examples are:

<table>
<thead>
<tr>
<th>Pre-pausal final</th>
<th>Non-final</th>
</tr>
</thead>
<tbody>
<tr>
<td>(\text{taḍuṭ})</td>
<td>‘wool’</td>
</tr>
<tr>
<td>(\text{tamaṭuṭ})</td>
<td>‘dirty woman’</td>
</tr>
<tr>
<td>(\text{iṭeṭ})</td>
<td>‘He sucks (breast).’</td>
</tr>
<tr>
<td>(\text{s a s in})</td>
<td>‘He will say to him.’</td>
</tr>
<tr>
<td>(\text{iggul})</td>
<td>‘he swore’</td>
</tr>
<tr>
<td>(\text{ka-yeis})</td>
<td>‘he guards’</td>
</tr>
<tr>
<td>(\text{iṛeš})</td>
<td>‘he strews’</td>
</tr>
</tbody>
</table>

\(^{14}\) Sequences of three homophonous consonants are not allowed. The three consonants are reduced to two e.g. \(\text{xeффеf} ‘be quick, be light’ > \text{txeffет} ‘You are light/quick.’\)
1.10. Summary of stops - fricatives

Spirantisation is a historical process which makes fricatives out of stops. The behaviour of these spirantised consonants differs depending on the position; in some positions the stop is realised while in other positions the corresponding fricative is realised. In initial position, there is a strong tendency for the stops to appear. In medial position, stops and fricatives are in phonemic opposition. In final position, one in general finds stops after consonants and fricatives after vowels. (C = consonant, V = vowel. The fricative consonants ḍ̱ ḍ̱, ḵ ḵ and ḡ ḡ are very rare. Cḍ is not attested):

<table>
<thead>
<tr>
<th>Initial position</th>
<th>Medial position</th>
<th>Final position</th>
</tr>
</thead>
<tbody>
<tr>
<td>b - ṃ</td>
<td>b - ṃ</td>
<td>Cb - ṃ</td>
</tr>
<tr>
<td>t</td>
<td>t - ṭ</td>
<td>Ct - ṭ</td>
</tr>
<tr>
<td>d - (ṭ)</td>
<td>d - ḍ</td>
<td>Cd - ḍ</td>
</tr>
<tr>
<td>ḍ</td>
<td>ḍ - ḍ</td>
<td>(X - ḍ)</td>
</tr>
<tr>
<td>k - ḷ</td>
<td>k - ḷ</td>
<td>Ck - ḷ</td>
</tr>
<tr>
<td>g</td>
<td>g - ḡ</td>
<td>Cg - ḡ (g)</td>
</tr>
</tbody>
</table>

1.11. Spread of pharyngealisation

The consonants t, d, s, z, r, l have pharyngealised counterparts ṭ, ḍ, ṣ, ṽ, ṟ, and marginally ḷ. The geminate counterparts of these pharyngealised phonemes are ṭṭ, ḍḍ, ṣṣ, ṽṽ, ṟṛ, and the rare phoneme ḷḷ. A pharyngealised consonant causes the spread of pharyngealisation to other consonants which means that they also become pharyngealised. In principle, any consonant can be pharyngealised phonetically except for pharyngeals and laryngeals. The minimum domain of pharyngealisation spread is the syllable and the maximum is the prosodic word which includes verbal and nominal clitics. Furthermore, the spread of pharyngealisation depends on speech tempo (cf. Boukous 1990: 76 for Tashelḥiyt Berber). In the following examples pharyngealisation spreads over the whole word:

| Lbaṭil       | > [lˁbˁɑtˁelˁ] | ‘boat’            |
| ṭṭaẓin       | > [tːˁɑžˁenˁ]  | ‘tajine’          |
| ayeffeṭ      | > [ayˁəfːˀətˁ]  | ‘cattle’          |
| taẓuxt       | > [tˁɑzˁoxˁtˁ] | ‘milk’            |
| tamelẓit     | > [tˁmˁɑlˁzˁitˁ] | ‘type of plant’   |
| aləẓen       | > [alˁɑzˁən]    | ‘tomorrow’        |
| isʔṭʔuḥen    | > [isˁətːəʔəhənˁ] | ‘sticks’          |
\[\text{iḥeṣṣel} \rightarrow [\text{iḥːəsːʕəl}] \quad \text{‘he falls’}\]
\[\text{ikemmet} \rightarrow [\text{ikʔəmːʕət}] \quad \text{‘it burns’}\]

Pharyngealisation that spreads to a clitic:

\[\text{iqqr as} \rightarrow [\text{iqːrˁ ɑs}] \quad \text{‘he tells him/her’}\]
\[\text{šebbṛan as} \rightarrow [\text{šˁəbːʔən ɑs}] \quad \text{‘they held for him’}\]

It is by no means a rule that clitics are pharyngealised in this position, compare the following text excerpts:

\[\text{aferraž ɑḏ} \rightarrow [\text{afːərəʔ ɑd}] \quad \text{‘this rooster’}\]
\[\text{ṛṛbic ɑḏ} \rightarrow [\text{ṛːʔbiʔee ɑd}] \quad \text{‘this grass’}\]

2. Vowels

The vocalic system of Ghomara Berber consists of three plain vowels a, i, u and one short central vowel e ([ə]; schwa).

2.1. Vocalic system

<table>
<thead>
<tr>
<th>Close</th>
<th>i</th>
<th>u</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mid</td>
<td>e</td>
<td></td>
</tr>
<tr>
<td>Open</td>
<td>a</td>
<td></td>
</tr>
</tbody>
</table>

**Vowel a - open-mid front unrounded vowel [IPA: e]**

In the pairs below the contrast between a and other vowels is shown.

\[\text{tasafṭ} \quad \text{‘chestnut tree’}\]
\[\text{tasifṭ} \quad \text{‘small river’}\]

\[\text{taslaṯ} \quad \text{‘bride’}\]
\[\text{asleṯ} \quad \text{‘two years ago’}\]

\[\text{itɛayan} \quad \text{‘he is searching’}\]
\[\text{iɛayen} \quad \text{‘he searched’}\]

\[\text{mul} \quad \text{‘owner’}\]
\[\text{lmal} \quad \text{‘property’}\]
The vowel \( \text{a} \) \( [ɛ] \) is realised as open back unrounded \( [α] \) in a pharyngealised environment, for example:

\begin{align*}
\text{aṭaṛ} & \quad [\text{aṭɑṛ}] \quad \text{‘leg’} \\
\text{aẓaṛ} & \quad [\text{ɑẓɑṛ}] \quad \text{‘root’}
\end{align*}

**Raising of final a**

In Ghomara, final \( \text{a} \) is pronounced as a short \( [e] \) in word-final position in pausal context (at the end of a phrase, not in other positions).\(^{15}\) It is found with all types of word classes, although most examples are nouns because of their frequency in phrase-final position in texts.

\[
\begin{array}{ll}
\text{/g ləhwa/} & \rightarrow [g\text{-}ləhwe] \quad \text{‘in the rain’} \\
\text{/ɛḏima/} & \rightarrow [ʕḏime] \quad \text{‘weak’ (F)} \\
\text{/tˤwila/} & \rightarrow [tˤwele] \quad \text{‘long’ (F)} \\
\text{/tˤqila/} & \rightarrow [tˤqele] \quad \text{‘heavy’} \\
\text{/lˤyda/} & \rightarrow [lˤwe] \quad \text{‘lunch’} \\
\text{/lˤarbiyya/} & \rightarrow [lʕɑrˁbːɪyːe] \quad \text{‘Arabic’} \\
\text{/mya/} & \rightarrow [mje] \quad \text{‘hundred’} \\
\text{/tamədda/} & \rightarrow [temæde] \quad \text{‘bird of prey’} \\
\text{/tamezgiḏa/} & \rightarrow [tem₂zgiḏe] \quad \text{‘mosque’} \\
\text{/n tsa/} & \rightarrow [n\text{-}tse] \quad \text{‘of the cow’} \\
\text{/yemma/} & \rightarrow [jɒme] \quad \text{‘mother’} \\
\text{/tamʊda/} & \rightarrow [temʊde] \quad \text{‘sow’} \\
\text{/g teẓḡa/} & \rightarrow [g\text{-}təẓɣe] \quad \text{‘in the forest’} \\
\text{/assa/} & \rightarrow [ɛsːe] \quad \text{‘nowadays’}
\end{array}
\]

When there is an adjacent (preceeding) pharyngealised, velar, glotal, uvular or pharyngeal consonant vowel heightening does not occur. The following examples do not show vowel heightening in word final position in pausal context.

\(^{15}\) This vowel heightening is a well-known phenomenon in many Arabic dialects. It exists in differing degrees in the dialects of North-Western Morocco. In Anjra the vowel heightening always occurs in final position or in pausal position and extends from (non-heightened) \([æ]\) to \([i]\) (Vicente, 2000: 28-29). For instance the name Malıkᵃ becomes Malikⁱ in such contexts. In Chefchaouen it is restricted to word-internal position. Its realisation is \([æ]\) (Moscoso, 2002: 27).
Examples of verbs are very few in texts, but they do exist as this example shows:

\[ \text{yemma nn-es he-tzalla} \]
\[ \text{mother of-3S 3FS-pray:IMP} \]
\[ \text{‘His mother prays.’} \]

**Vowel /i/ near-close front unrounded vowel [IPA: ɪ]**

The vowel /i/ is realised as a near-close front unrounded vowel [ɪ]. In certain environments, often adjacent to an alveolar consonant /i/ is realised as a close front unrounded vowel [i], e.g. in the following examples:

- \( t\text{izezzraṭan} \) > \[ tɪzəzːrɛθɛn \] ‘heyforks’
- \( \text{tiskert} \) > \[ tɪskərt \] ‘garlic’
- \( \text{akkil} \) > \[ ɛkːɪl \] ‘curdled milk’
- \( \text{inu} \) > \[ ɪnu \] ‘my’
- \( \text{aḡḍi} \) > \[ ɛɣðɪ \] ‘jackal’
- \( \text{izi} \) > \[ ɪzi \] ‘fly’

The contrast between i and other vowels is illustrated in the following examples:

**i - a**

- \( ssirḏax \) ‘I wash’ (AOR)
- \( ssarḏax \) ‘I washed’ (P)
- \( aḡḍi \) ‘jackal’
- \( ayaḍa \) ‘dog’
- \( aḡelzim \) ‘pick-axe’
- \( iḡelzam \) ‘pick-axes’
i - u
azru ‘mill’
zri ‘pound!’

In a pharyngealised environment /i/ is realised as a close-mid front unrounded /e/, for example:

aṭil [ɑtˁelˁ] ‘grape’
aḡṭiṭ [ɑɣtˁetˁ] ‘bird’

Vowel u [IPA: u]
This vowel /u/ is realised as a close back rounded vowel [u]. When in contact with a velar, uvular or pharyngeal consonant it is realised as a near-close back rounded vowel [ʊ], e.g.

n uɣyul [n ʊʁjul] ‘of the donkey’

The vowel is realised as a close-mid back rounded vowel [o] when influenced by a pharyngealised consonant, for example:

tekṣut [təxsˁotˁ] ‘she was afraid’

Below we contrast /u/ with schwa.

u - e

ihḥfur ‘he always digs’
iḥfer ‘he dug’
a-fettih ‘hole’
a-futtiḥ ‘ass’

Vowels in borrowings from European languages, mainly from Spanish, are realised in the same way as other vowels, for example:

stilus [stɪlus] ‘pens’
rrigalus [rːɪgɑlus] ‘presents’
lebyixus [bːyɪxus] ‘old men’
lĪgatîs [lĪgatʼis] ‘sailing boats’
2.2. Diphthongs

A number of nouns which are borrowed from Arabic have the diphthongs aw [au] and ay [ai]. These are historical diphthongs in Arabic (they cannot be contrasted with (non-existent) au and ai and therefore they do not form minimal pairs). In mainstream Moroccan dialects the diphthongs have become monophthongs. The forms with diphthongs are sometimes in free variation with forms that have u and i. Some examples are:

**Diphthong aw**

<table>
<thead>
<tr>
<th>Word</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>ṛrawţ</td>
<td>‘rice’</td>
</tr>
<tr>
<td>lhawţ</td>
<td>‘vegetable garden’</td>
</tr>
<tr>
<td>lhayţ</td>
<td>‘wall’</td>
</tr>
<tr>
<td>ttawḇ</td>
<td>‘cloth’</td>
</tr>
<tr>
<td>llawn</td>
<td>‘colour’</td>
</tr>
<tr>
<td>lmawţa</td>
<td>‘wave’</td>
</tr>
</tbody>
</table>

**Diphthong ay**

<table>
<thead>
<tr>
<th>Word</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>lɣays</td>
<td>‘mud’</td>
</tr>
<tr>
<td>lxayţ</td>
<td>‘thread’</td>
</tr>
<tr>
<td>lɣayţa</td>
<td>‘flute’</td>
</tr>
<tr>
<td>ssayf</td>
<td>‘sword’</td>
</tr>
</tbody>
</table>

However in some cases the historical diphthong has become a monophtong, e.g. lhīt ‘room’

An example of a noun which has aw ~ u is:

ṣṣawţ ~ ṣuţ ‘voice’
2.3. Mid central unrounded vowel e [ə] (schwa)

2.3.1. Phonetic realisation
Schwa is realised phonetically in multiple ways. Different realisations are governed by adjacent consonants, but also by intonation. Below a number of consonantal environments are treated. Schwa can be realised as:

- A short near-open central vowel [ə] when immediately preceding x, y, ḥ, q and ɛ, for example:

\[
\begin{align*}
\text{lwest} & \quad [lwəxt] \quad \text{‘time’} \\
\text{mdewwex} & \quad [mdəwːəx] \quad \text{‘having a headache’} \\
\text{iffey} & \quad [ɪfəvə] \quad \text{‘He went out.’} \\
\text{sʃeḥ} & \quad [sːβəh] \quad \text{‘morning’} \\
\text{inneenee} & \quad [ɪnːənəs] \quad \text{‘It flourished.’} \\
\text{ḥmeq} & \quad [hmeq] \quad \text{‘crazy’}
\end{align*}
\]

- [ɑ] when it precedes or is between pharyngeal(ised) consonants, for example:

\[
\begin{align*}
\text{ifekkeṛ} & \quad [ɪfəkːɑrˁ] \quad \text{‘He grabbed.’} \\
\text{inṭeṛ} & \quad [ɪntˁɑrˁ] \quad \text{‘He flew.’}
\end{align*}
\]

In some cases there is no difference in pronunciation between /ə/ and /a/. Compare the realisation of the Aorist form of the following verb which has /ə/ underlyingly and the Imperfective form which has /a/ underlyingly.

\[
\begin{align*}
\text{ifeṛṛeḥ} & \quad [ɪfərːʕɑħ] \quad \text{‘He makes happy.’} \\
\text{itfəṛṛaḥ} & \quad [ɪtfərːʕɑħ] \quad \text{‘He always makes happy.’}
\end{align*}
\]

When a clitic is added the difference shows up. The schwa dissappears whereas the /a/ remains in its position (cf. 2.3. above for schwa insertion rules).

\[
\begin{align*}
\text{ifeṛṛḥ ahen} & \quad [ɪfərːħ ɛhən] \quad \text{‘He makes them happy.’} \\
\text{itfəṛṛaḥ ahen} & \quad [ɪtfərːʕɑħ ɛhən] \quad \text{‘He always makes them happy.’}
\end{align*}
\]

- Schwa is realised as [u] and [i] before the semivowels ww and yy. For example:

\[
\begin{align*}
\text{xewwef} & \quad [xuwwəf] \quad \text{‘to scare’}
\end{align*}
\]
səyyəḇ  [siyyəḇ]  ‘to throw’

2.3.2. Phonemic status

Schwa has a special status as a vowel in that its position is partly predictable (cf. Kossmann 1995). Schwa does not appear in open syllables and in final position. Nouns with Berber morphology, with one exception, allow for phonetic schwa which is predictable according to syllable structure, while for many Arabic nouns schwa placement is not predictable. The placement of schwa is predicted by the following procedure: In nouns schwa is inserted from right to left in a cc-string yielding cec (except when there is a -t suffix, see below). In the next example schwa insertion applies to the noun.

aḵmz > aḵmez  ‘nail’

Schwa is not allowed in an open syllable. If it is inserted in the first cc-sequence from the right side and it appears in an open syllable, the resulting form is ungrammatical.

iḵmzan > *iḵmezan  ‘nails’

Therefore schwa must be reinserted in the adjacent left CC sequence to yield the correct form.

iḵmzan > *iḵmezan > iḵemzan  ‘nails’

The same applies to other nouns of the same type as well as other types of nouns, for example:

amḍer  ‘branch’
imedren  ‘branches’
awrez  ‘heel’
iwerzen  ‘heels’
azreɣmel  ‘centipede’
izeryemlen  ‘centipedes’

Some Arabic-morphology nouns abide by the same rule, for example when a feminine suffix is added to a masculine noun:
However, there is a group of Arabic-morphology nouns in which the placement of schwa is not predicted by the procedure above. For these nouns we have to assume an underlying schwa at the phonological level\(^\text{16}\). Schwa is not inserted from right to left in a cc-string but can only be analysed as being present underlingly, as in these examples\(^\text{17}\).

\begin{itemize}
  \item \textit{lğmel} ‘male camel’
  \item \textit{lğeml-a} ‘female camel’
\end{itemize}

There is one Berber-morphology noun in our corpus which has schwa in an unexpected position.

\textit{azeḇg} ‘part of the plough’

Feminine singular forms are problematic. The feminine singular suffix -\(t\) does not participate in the insertion rule (there is a rare suffix -\(et\), see III.1.3.2. morphology). Therefore, in this case the schwa insertion rule applies to the base. The feminine form of \textit{ameslem} ‘muslim’ is \textit{tameslemt} ‘muslima’ instead of the expected \textit{*tamselmet} ‘muslima’ according to the rules above. In the feminine plural which has plural suffix -\(an\) schwa appears in the expected position \textit{timselman} ‘muslim women’. The number of nouns which have schwa’s that change position is quite limited in Ghomara Berber. Another example is:

\begin{itemize}
  \item \textit{azref} ‘road’
  \item \textit{tazreft} ‘path’
\end{itemize}

Schwa insertion applies in the same way to verbs. Schwa is inserted in a cc-string from right to left in Berber-morphology as well as in Arabic-morphology verbs. Compare the following Imperative singular and plural forms of the Berber-morphology verb ‘dig’ and the Arabic-morphology verb ‘cultivate’.

\begin{itemize}
\end{itemize}

\textsuperscript{16} We basically follow the analysis proposed by Kossmann (1995) for Figuig Berber and other dialects to which structure-based syllabification applies.

\textsuperscript{17} Marçais (1977:93) notes that the schwa in these nouns is often placed before the liquids \(l\), \(n\) and \(r\) and the labials \(b\), \(f\) and \(m\). As the examples above show this is only a tendency.
Sometimes schwa is found following the first consonant in a ccc-stem resulting in cecstrings instead of the expected cce. This type is restricted to the following verbs in our corpus.

\[
\begin{align*}
\text{ḥfeṛ} & \quad \text{‘dig!’} \\
\text{ḥefṛ-awet} & \quad \text{‘dig!’ (PL)} \\
\text{fleḥ} & \quad \text{‘cultivate!’} \\
\text{felḥu} & \quad \text{‘cultivate!’ (PL)}
\end{align*}
\]

Some Aorist forms of cc verbs adopt the form ecc instead of the expected cec, for example:

\[
\begin{align*}
\text{efk} & \quad \text{‘give’} \\
\text{ewt} & \quad \text{‘hit’}
\end{align*}
\]

Other cc verbs show the cec form:

\[
\begin{align*}
\text{zer} & \quad \text{‘see’} \\
\text{ney} & \quad \text{‘kill’}
\end{align*}
\]

Verbs of the cccc type, which include reduplicating verbs, allow for three consonants in a row as in the following examples. Schwa is not found in open syllable.

\[
\begin{align*}
\text{perpren} & \quad (< \text{*_prepren}_) \quad \text{‘they flew’} \\
\text{selsl-awet} & \quad (< \text{*_selsl-awet}_) \quad \text{‘bake grain’ (PL)} \\
\text{beryz-awet} & \quad (< \text{*_beryez}_) \quad \text{‘swap’ (PL)}
\end{align*}
\]

Schwa is found optionally at the beginning of a verb if there is no prefix and there is an initial consonant cluster or a geminate consonant, for example:

\[
\begin{align*}
(e)\text{freq} & \quad \text{‘divide!’} \\
(e)\text{nda} & \quad \text{‘go!’} \\
(e)\text{bb} & \quad \text{‘take!’}
\end{align*}
\]

If a full vowel or schwa follows the first consonant, it is not possible to have initial schwa, for example:

\[
\begin{align*}
\text{ferq-awet} & \quad \text{‘divide!’ (PL)}
\end{align*}
\]
Schwa insertion applies at the word level, which includes clitics. The rules spelled out above thus apply to the clitics as well, such as the direct and indirect object pronouns (cf. III.11. for pronouns). Compare the following examples:

\begin{itemize}
  \item \textit{inker} \quad \text{‘he denied’}
  \item \textit{inekṛ at} \quad \text{‘He denied her.’}
  \item \textit{iɣeṛs as i flan} \quad \text{‘He slaughtered for someone.’}
\end{itemize}

The following examples show that schwa does not change position when followed by a noun which begins with a vowel, in other words the rule does not apply across word boundaries.

\begin{itemize}
  \item \textit{irfee ašaqr ahen} \quad \text{‘He lifted the axe.’}
  \item \textit{amka iḵšem aḡdi} \quad \text{‘When the jackal went in.’}
  \item \textit{iɣṛes tayatt} \quad \text{‘He slaughtered a goat.’}
\end{itemize}

When a verbal subject suffix of the shape ec is followed by a vowel-initial clitic, it becomes a in order to prevent schwa in open syllable, e.g.

\begin{itemize}
  \item \textit{rewlen leḥšam nnes} \quad \text{‘His children fled.’}
  \item \textit{rewlan as (*rewlen as)} \quad \text{‘They fled from him.’}
  \item \textit{ṭṭfan as teṯ (*ṭṭfen as teṯ)} \quad \text{‘They caught her for him.’}
\end{itemize}

The rule only concerns the suffixed subject markers and does not apply to the base of the verb. Compare for example:

\begin{itemize}
  \item \textit{išebbṛ ay} \quad \text{‘He caught me.’}
  \item \textit{šebbṛan ay} \quad \text{‘They caught me.’}
\end{itemize}

In sum, schwa is largely predictable through a set of rules in nouns as well as in verbs. There are two exceptions of the following type: the nominal feminine singular suffix -t is not part of the schwa insertion rule. The other exception is borrowed nouns of the type CeCC which have unpredictable schwa. For verbs the verbal complex, that is the verb and its clitics, is the domain for which schwa insertion applies. ecc and wecc verbs form an exception to the rules as well. Finally, cccc-verbs allow ccc sequences without schwa insertion.
3. Assimilations

In this section consonant assimilations within the word and over word boundaries (sandhi) are treated together. Virtually all regular assimilations concern alveolar stops and post-alveolar fricatives. There are a number of minor assimilations of other consonants which are in contact. When two alveolar stops are in contact there is a difference between word-internal assimilations and assimilations over word boundaries. Within the word, the result is a geminate, while over word boundaries (including verbal clitics), the result is a simple stop. Voice assimilation is always regressive, except for one case.

3.1. Regressive voice assimilation

t + d > dd

tdafen > ddafen ‘to fight’
idaḏam > iddaḏam ‘he fetches water’

ḏ + t > t

taḇuseyyaḏt > taḇuṣeyyat ‘type of snake’
taeuqqat > taɛuqqat ‘knot’

Complete assimilation does not obligatorily take place when a t suffix is added. Sometimes there is only regressive voice assimilation, for example:

d + t > tt

aḥeddad ‘a smith’ > taḥeddatt ‘practice of being a smith’
- > taherruṭt ‘type of insect’

A special case is the assimilation of the masculine and feminine third person DO pronoun to the deictic clitic d / id, for example (cf. also IV.3.3.5. syntax):

tebb as t id > tebb as d id ‘She has brought him hither.’
tebb as tet d > tebb as ded ‘She has brought her hither.’

In sandhi there is regular voice assimilation.
d + t > t t

isafey d taseyyalt  >  isafey t taseyyalt  ‘He took out the girl.’
hedda d tamedda  >  hedda t tamedda  ‘The eagle came.’

The exception the deictic clitic d / id when it is in preverbal position, for example:

d + t > d

smana a d tedda  >  smana a d edda  ‘Where did she come from?’
ma ħtaż a d teqqul  >  ma ħtaż a d eqqul  ‘He did not want to return.’
a d teqqul  >  a d eqqul  ‘She will come back.’

There is regular devoicing of sibilants when they precede voiceless t. The masculine and the feminine forms below show this process.

z + t > st

aɛebb biz  >  tacebbist  ‘calf’
amuggaz  >  tamuggast  ‘stick to pin animals’

ž + t > št

amaẓuẓ  >  tamaẓuṣt  ‘last born’

ž + t > št

ameɛṛaẓ  >  tameɛṛašt  ‘someone who limps’

In sandhi regressive voice assimilation takes place as well, for example:

ž + š > š š

ma itɛeṛraž ši  >  ma itɛeṛraš ši  ‘He does not limp.’

t + ż > d ż

a tẓall  >  a dẓall  ‘She will pray.’

š + d > ż d

š deṣṣad  >  ž deṣṣad  ‘You will hunt/fish.’

s + d > z d

ten a d a eeqlet..  >  tenn az d a eeqlet..  ‘She told him: will you recognise..?’
When alveolar s and z precede palatal š and ž there is regressive assimilation to place of articulation. The result is a geminate consonant.

\[ s + š \rightarrow š š \]
\[ ma \ yreš \ ši \rightarrow ma \ yreš śi \] ‘He does not have’

\[ z + ž \rightarrow ž ž \]
\[ iggež Žehha \rightarrow iggež Žehha \] ‘Zehha went down.’

Finally, there is this irregular assimilation:

\[ bb + š \rightarrow ppš \]
\[ bbšel \rightarrow ppšel \] ‘onions’

### 3.2. Assimilation to pharyngealised consonants

Pharyngealised alveolar stops also have regressive voice assimilation. The resulting consonant is always pharyngealised.

\[ t + ḍ \rightarrow ṭṭ \]
\[ ka-ṭṭeṣṣa \rightarrow ka-ṭṭeṣṣa \] ‘She loses weight.’

\[ t + ṭ \rightarrow ṭṭ \]
\[ itṭewwal \rightarrow itṭewwal \] ‘He makes longer.’

\[ t + t \rightarrow ṭṭ \]
\[ itṭeḥḥak \rightarrow itṭeḥḥak \] ‘He makes laugh.’

### 3.3. Assimilation of n and l

There are different assimilations of /n/ and /l/. Assimilations can be progressive as well as regressive.

\[ n + l \rightarrow ll ∼ nn \]
When the preposition n ‘of’ is assimilated to the Arabic article l, a geminate ll or nn is the result, e.g.
tlaṭa n leḥšam $>$ tlaṭa l leḥšam  
‘three children’

ḍḍmaɣ n lefqī $>$ ḍḍmaɣ n nefqī  
‘The head of the imam.’

**n + l > l**

In other cases a single l is the result.

iḵšem fxessen lweḥš $>$ iḵšem fxesse lweḥš  
‘Animals entered upon them.’

**n + r > rr**

This assimilation takes places only when the n is the verbal prefix, e.g.

nrennu $>$ rrrennu  
‘We add.’

**l + n > nn**

Within the word boundary the result is a geminate.

a nerwel fḥalna $>$ a nerwel fḥanna  
‘We will flee.’

**l + n > n**

Outside the word boundary the l is deleted.

g ul n teryalt... $>$ g u n teryalt...  
‘in the middle (heart) of the basket’

kul nnхаr $>$ ku nnхаr  
‘every day’

The preposition dar ‘to’ loses its final r when followed by l (cf. III.13.2.3. for this preposition). This context often appears, as many borrowed Arabic nouns have the article /l/ initially.

**dar libir $>$ da libir**  
‘to the well’

The n assimilates to the place of articulation of the velar and uvular consonants and labial stops, e.g.

nqeṭṭe $>$ nqeṭṭee  
‘We cut.’

š a ngix $>$ š a ngix  
‘I will push.’

n-bheṭ $>$ m-bheṭ  
‘be astonished’
3.4. Long distance assimilation and metathesis

There is irregular distant voicing of voiceless alveolar consonants when they are followed by the deictic clitic d surrounded by voiced consonants (and vowels), for example asen becomes azen, and the final t of the verb becomes d.

```
he-ttitu a azen = d = te-bb
3FS-go:I AD 3PL:IO = DC = 3FS-take:A
'She goes to bring for them.'
```

teba-a-d = ay = d aṭerraš n waman
2S-take:P-2S = 1S:IO = DC jar:EL of water:EA
'Bring me a jug of water.'

The particle d ‘hither’ and the first person plural prefix n optionally change position18.

```
 a k d nerry ah d > a k nderry ah d 'We will return it for you.'
a d neqqul > a ndeqqul 'We will return.'
```

3.5. Voicing of first person singular suffix -ax

The first person singular suffix is -ax (cf. III.7.2. morphology). In the next example the verbal suffix is followed by a voiceless consonant:

```
ẓẓeṛqpax tiḡura inu
close:P-1S doors:EL POSS-1S
'I close my doors'
```

When followed by a vowel or a voiced consonant the first person singular suffix becomes -ay, for example:

```
nn-ay = ak i-ella
say:P-1S = 2MS:IO 3MS-go.up:P
'I told you he went up'
```

```
d a xebbė-ay zdu ugeğuf
CRT AD hide:A-1S under bush:EA
'I will hide under a bush'
```

18 In some verbs such as aḡum ~ daḡum the d has become a fixed element of the verb.
3.6. The Arabic article l-

The Arabic article l- assimilates regularly to post-alveolar consonants, some examples are:

- *ddin* 'religion, debt'
- *ssḇeɛ* 'lion'
- *ttawḇ* 'cloth'
- *zzif* 'handkerchief'
- *ššfeṛ* 'eyelid'
- *ṛṛas* 'cape'
- *ṭṭḇiḇ* 'doctor'

In many Moroccan Arabic dialects the article assimilates to ż yielding żż. In Ghomara ż becomes an affricate ġ under the influence of l-. The article does not assimilate, for example:

- *lǧmel* 'camel'
- *lǧeld* 'skin, hide'
- *lǧim* 'pocket'
- *lǧen* 'ghost'

Furthermore, the article can assimilate to the labial consonants b, p, m, f, the velar stop k and the uvular stop q. The article can be assimilated completely, with a geminate consonant as a result, or partially resulting in a hardly audible l. This (partial) assimilation only takes place if a consonant cluster follows the article. If the article is followed by a consonant and a vowel there is no assimilation. If asked to pronounce the word slowly, the speakers pronounce the article and the geminate consonant. In that case there is a very short schwa between the article and the geminate. The article is therefore put between brackets in these examples. Compare the following nouns.

- *lpeṣṣiṭa* 'peseta'
  (el’e)pṣaṣet 'pesetas'

- *lberdaɛ* 'saddle'
  (el’e)bbḥar 'sea'

In the words *learbiyya* ‘Arabic’ and *arbbea* ‘four’ have a geminate bb. This might be the result of the preceding ṛ which has the same effect as the article l-.

- *lmalik* 'king'
3.7. Dropping of final consonants

Certain consonants in final position can be elided in Ghomara Berber (and Arabic). Following a vowel (a, i, u, e) the consonants n, l, d and t can disappear. This differs according to speech tempo. Some examples are:

<table>
<thead>
<tr>
<th>Consonant</th>
<th>Original</th>
<th>Elided</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>n</td>
<td>s warsin</td>
<td>s warsi</td>
<td>‘with hunger’</td>
</tr>
<tr>
<td>l</td>
<td>itseğal</td>
<td>itseğa</td>
<td>‘It records.’</td>
</tr>
<tr>
<td>d</td>
<td>εawed</td>
<td>εawe</td>
<td>‘again’</td>
</tr>
<tr>
<td>t</td>
<td>sskuṭ</td>
<td>ssku</td>
<td>‘be quiet’</td>
</tr>
</tbody>
</table>

3.8. Vocalic sandhi

When there are two consecutive vowels the following procedures take place:

**Insertion of a semi-vowel**

A glide y is inserted between a + a, a + i and i + a, for example:

<table>
<thead>
<tr>
<th>Original</th>
<th>Elided</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>lhedra ahen</td>
<td>lhedra y ahen</td>
<td>‘that talk’</td>
</tr>
<tr>
<td>ya aṣeyyal</td>
<td>ya y aṣeyyal</td>
<td>‘only a boy’</td>
</tr>
<tr>
<td>idda ighes</td>
<td>idda y ighes</td>
<td>‘He went with him.’</td>
</tr>
</tbody>
</table>
Vowel becomes semi-vowel

\[
\begin{array}{cccc}
\text{a} + \text{i} & \rightarrow & \text{a} \text{ y} \\
\text{idda} \text{ isebber} & \rightarrow & \text{idda} \text{ ysebber} & \text{‘He went to grab.’} \\
\text{netta} \text{ isker} & \rightarrow & \text{netta} \text{ ysker} & \text{‘he did’} \\
\text{ddwa} \text{ inshi} & \rightarrow & \text{ddwa} \text{ ynsi} & \text{‘some drugs’}
\end{array}
\]

\[
\begin{array}{cccc}
\text{u} + \text{i} & \rightarrow & \text{u} \text{ y} \\
\text{š} \text{i felhu} \text{ ibawen} & \rightarrow & \text{š} \text{ i felhu} \text{ ybawen} & \text{‘They are going sow beans.’} \\
\text{zdu} \text{ izref inshi} & \rightarrow & \text{zdu} \text{ yzref inshi} & \text{‘under some road’}
\end{array}
\]

\[
\begin{array}{cccc}
\text{i} + \text{i} & \rightarrow & \text{y} + \text{i} \\
\text{maši} \text{ iḍ izref} & \rightarrow & \text{mašy} \text{ iḍ izref} & \text{‘going along the road’}
\end{array}
\]

\[
\begin{array}{cccc}
\text{a} + \text{u} & \rightarrow & \text{a} \text{ w} \\
\text{ya} \text{ ifurma} \text{ u şafi} & \rightarrow & \text{ya} \text{ ifurma} \text{ w şafi} & \text{‘Just the form, that is all.’} \\
\text{ya} \text{ usammer} & \rightarrow & \text{ya} \text{ wsammer} & \text{‘a sunny hill’}
\end{array}
\]

\[
\begin{array}{cccc}
\text{i} + \text{u} & \rightarrow & \text{w} \\
\text{i uceyal} & \rightarrow & \text{i wceyral} & \text{‘and the boy’}
\end{array}
\]

\[
\begin{array}{cccc}
\text{u} + \text{a} & \rightarrow & \text{w} \text{ a} \\
\text{iddu} \text{ am siha daryan} & \rightarrow & \text{iddw} \text{ am siha daryan} & \text{‘He goes from here to there.’} \\
\text{hettiṭu} \text{ azen d ebb} & \rightarrow & \text{hettiṭw} \text{ azen d ebb} & \text{‘They go and take for her.’}
\end{array}
\]

Vowel loss

\[
\begin{array}{cccc}
\text{a} + \text{a} & \rightarrow & \text{a} \\
\text{If two a’s of a verb and a noun come into contact, the result is reduction to one a. Otherwise a glide y is inserted (see above).}
\end{array}
\]

\[
\begin{array}{cccc}
\text{idda} \text{ argaz} & \rightarrow & \text{idd} \text{ argaz} & \text{‘The man went.’} \\
\text{idda} \text{ ayižd} & \rightarrow & \text{idd} \text{ ayižd} & \text{‘The billy goat went.’}
\end{array}
\]

\[
\begin{array}{cccc}
\text{u} + \text{u} & \rightarrow & \text{u} \\
\text{zdu} \text{ ugeğuf} & \rightarrow & \text{zdu} \text{ geğuf} & \text{‘under a bush’}
\end{array}
\]
4. Labialisation
Ghomara Berber has a number of labialised velar and uvular consonants. The short labialised consonants are \( k^w, k^w, g^w, g^w, x^w, y^w \), the geminate consonants are \( kk^w, gg^w, qq^w \).

4.1. Realisation of labialisation
Labialisation of a consonant is realised phonetically in different ways. In the following the phonetic realisation will be discussed. Labialised consonants will be represented by the abstract character \( G^w \). The behaviour of labialised consonants can be captured by a few basic rules. However, some specification is required.

Rule 1
The following rule applies to the base of the word: If there is a schwa position adjacent to the labialised consonant, this position is realised as [u]. Phonetically it is indistinguishable from the plain vowel /u/.

\[
eG^w c > uG c \\
i-suyn-an /i-sey"n-an/ \quad \text{‘ropes’} \\
š a lukm-et / š a lek"m-et/ \quad \text{‘You will arrive.’}
\]

\[
cG^w e > cG u \\
a-syun /asy"en/ \quad \text{‘rope’} \\
ssenkur /ssenk"er/ \quad \text{‘make stand up’}
\]

\[
eG^w > uG \\
š a ffuy /š a ffey"/ \quad \text{‘He will exit.’}
\]

In cases where a three-consonant cluster appears in which the labialised consonant is in the middle, the (non-adjacent) schwa in the base is realised as \( u \). A schwa position in the affixes can not be realised as \( u \).

\[
eG^w c > uG c \\
š a ssunkr-et \quad \text{‘You will make stand up.’}
\]

Rule 2
If there is no schwa adjacent to the labialised consonant, labialisation is basically realised on a consonant position. In consonant clusters, it is the first consonant of the cluster that takes the labialisation, irrespective of whether it is a velar/uvular consonant or not – put
otherwise, in Gʷ-final clusters the labialisation is transferred to the whole cluster. Rounding of the lips already starts before the velar/uvular consonant is uttered.

\[
\begin{align*}
GʷcV & > \quad GʷcV \\
\text{aʷylal} & \quad \text{‘loam pot’}
\end{align*}
\]
\[
\begin{align*}
cGʷV & > \quad cʷGV \\
\text{tiʷzylal} & \quad \text{‘ladles’}
\end{align*}
\]
\[
\begin{align*}
Gʷce & > \quad Gʷce \\
\text{aʷkser} & \quad \text{‘piece of bread’}
\end{align*}
\]

Rule 1 only applies within the base of a word; schwa which is part of an affix is not coloured by a preceding labialised consonant; instead the labialisation is realised on (and before) the labialised consonant (cluster), e.g.:

\[
\begin{align*}
ceGʷ & > \quad ucG \\
\text{š a ssṛy-em} & \quad \text{‘You will light.’}
\end{align*}
\]

In the case where there is no schwa preceding the cluster, the whole consonant cluster takes the labialisation.

\[
\begin{align*}
cG & > \quad wcG \\
\text{š a ffʷ-em} & \quad \text{‘You (PL) will go out.’}
\end{align*}
\]

In the transcription used here, we use a phonetic transcription of what is phonemically labialisation, writing \(u\) where it is realised as \(u\) (i.e. in schwa position) and, where labialisation is not realised as \(u\), with a \(ʷ\) on the labialised member of the consonant cluster, i.e.

\[
\begin{align*}
\text{š a ffuy} & \quad /\text{š a ffeyʷ}/ \\
\text{š a ffyʷ-em} & \quad /\text{š a ffyʷem}/
\end{align*}
\]

\subsection{4.2 Analysis of labialisation}

As follows from the presentation above, an adjacent labialised consonant causes /e/ to be pronounced /u/. This pronunciation leads to a merger with the plain vowel /u/. The difference between [u] as an allophone of /e/ and [u] as a realisation of /u/ can only be established on the basis of the general phonotactic restrictions to the placement of schwa.
(see 2.3.) which also apply to its allophones, including [u]. The vowel /e/ cannot stand in an open syllable. On the other hand, there is no restriction whatsoever to having the plain vowel phoneme /u/ in an open syllable. As a result, [u] (/e/) disappears in contexts where it would be in an open syllable, while [u] (/u/) is maintained. This can be shown by comparing the Imperative forms of two verbs. In the Imperative singular they both have [u]:

A. (e)qqur
   ‘dry up!’ IMP.S
B. (e)qqul
   ‘return!’ IMP.S

When the plural Imperative marker is added, they behave differently. In example A u maintains its position while in example B u shifts to initial position.

A. qquṛ-awet
   ‘dry up!’ IMP.PL
B. uqql-awet
   ‘return!’ IMP.PL

The same happens in the next examples in which the difference between fixed and flexible u shows up.

A. (e)kku
   ‘dry up!’ IMP.S
   (e)kkw-awet
   ‘dry up!’ IMP.PL
B. (e)kkur
   ‘stand up!’ IMP.S
   ukkr-awet
   ‘stand up!’ IMP.PL

From this, we conclude that the verbs in examples A have a plain vowel /u/ (/eqquṛ/, /ekku/), while the [u] in the other verbs is a realisation of the labialisation of the adjacent consonant on a contingent schwa (i.e. /eqqʷel/, /ekkʷer/). There exists an opposition between pre-labialised realisations and forms which have a genuine /w/. In pre-labialised realisations, schwa is not inserted where expected according to schwa-insertion rules, while (under the right circumstances) there is no impediment to inserting schwa after /w/. Compare the following examples:

A. š a weylen
   ‘You (PL) will be stuck.’
B. š a uqqlem (*š a weqqlem)
   ‘You (PL) will return.’

It is impossible to insert schwa in cases like example B between the perceived w and the following consonant.

Our corpus contains one minimal pair which shows that labialisation is phonological.
A. aɣlal ‘sea snail’
B. aɣʷlal ‘loam pot’

In some words, labialisation is optional:

\[ \text{taɣʷzalt} \sim \text{taɣzalt}^{19} \]
\[ \text{‘bogue’ (fish sp.)} \]
\[ \text{tizyal} \sim \text{tizʷyal} \]
\[ \text{‘ladies’} \]
\[ \text{ney} \sim \text{nuy} \]
\[ \text{‘kill!’} \]
\[ \text{ffey} \sim \text{ffuy} \]
\[ \text{‘go out!’} \]
\[ \text{š a ryen} \sim \text{š a rʷyen} \]
\[ \text{‘They will be lit.’} \]
\[ \text{ffy-awet} \sim \text{uffy-awet} \]
\[ \text{‘go out!’ (PL)} \]
\[ \text{lkem} \sim \text{lkum} \]
\[ \text{‘arrive’} \]

There is one word which in an irregular manner, allows labialisation to be realised both as
pre- and as post-labialisation:

\[ \text{taxuṣt} \sim \text{taʷxešt} \]
\[ \text{‘molar tooth’} \]

As mentioned above, when labialisation is realised by the allophone [u] of schwa, it is only
possible to establish its phonological interpretation because of the existence of other forms.
Of course, there are quite some words for which this is impossible to ascertain. This is
especially the case of words which have no forms where /e/ would appear in an open
syllable, e.g.

A. tayuṣmart ‘jaw’
B. tiyuṣmaran ‘jaws’

There is nothing that allows us to decide whether these forms are phonologically
/tayuṣmart/, /tiyuṣmaran/ or /taɣʷeṣmart/, /tiɣʷeṣmaran/.

---

^{19} The Berber-morphology noun tayzalt ‘bogue’ is used in the neighbouring Arabic dialects and in the Arabic-speaking city Tetouan as well. The neighbouring Arabic dialects do not show the same type of (pre)labialisation as Ghomara Berber.
III Morphology

1. The Berber-morphology noun

In Ghomara Berber there is a distinction between Berber-morphology and Arabic-morphology nouns which form two separate morphological classes. These are the main morphological noun classes. Berber-morphology nouns can be etymologically of Berber origin or integrated loanwords. Arabic-morphology nouns are borrowed nouns which retain their original Arabic morphology. Berber-morphology nouns comprise about 47% of our corpus while morphologically Arabic nouns comprise approximately 53%, meaning that an enormous amount of Arabic nouns have been borrowed that keep their original morphology (see III.2. for Arabic-morphology nouns). In this section the morphological structure of the Berber-morphology noun will be examined. The categories expressed in the noun will be discussed followed by a discussion on the prefix and the base and the suffix, which is mostly about regular plural formation. A separate section presents the apophonic plurals which are formed by vowel changes in the base (in combination with the plural prefix). In the final section some minor exceptional cases are discussed; differing masculine and feminine plurals, irregular plural formations, non-affix nouns, and compounds. The Berber noun has the basic structure prefix-base-(suffix). The prefix expresses gender, state and number while the suffix expresses number and gender. The base consists of a lexical stem which expresses number in some types of plural formation. The diminutive degree can be expressed in the base as well. In this chapter we do not discuss diminutive formation (cf. III.3.).

Schematically, the basic structure of the noun is as follows:

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Base</th>
<th>Suffix</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender, State, Number</td>
<td>Number/Degree</td>
<td>Number, Gender</td>
</tr>
</tbody>
</table>

First we will present in a general way how the categories of gender, number and state are expressed. Then, the morphemes which make up the Berber noun will be discussed separately. In the first part the prefix will be discussed. State distinctions will be discussed under the gender and number headings. In the second paragraph we will present the suffixes and their interaction with the base. Finally, the base will be discussed in the section on apophonic plural patterns. The final paragraphs will deal with irregular plural formation and nouns without number opposition.
1.1. The categories expressed in the Berber noun

1.1.1. Gender
There are two genders in Ghomara Berber, masculine and feminine. For humans and other higher animates, gender derivation is possible by means of change of the affixes, for example:

<table>
<thead>
<tr>
<th>M:SG:EL</th>
<th>F:SG:EL</th>
</tr>
</thead>
<tbody>
<tr>
<td>a-ḥmam</td>
<td>ṭa-ḥmam-t</td>
</tr>
<tr>
<td>a-ḏđi</td>
<td>ṭa-ḏđi-t</td>
</tr>
<tr>
<td>a-belrre</td>
<td>ṭa-belrre-t</td>
</tr>
<tr>
<td>a-qyul</td>
<td>ṭa-qyul-t</td>
</tr>
<tr>
<td>a-yaw</td>
<td>ṭa-yaw-t</td>
</tr>
</tbody>
</table>

The same derivation is possible for some professions or nouns describing characteristics of people, for example:

<table>
<thead>
<tr>
<th>M:SG:EL</th>
<th>F:SG:EL</th>
</tr>
</thead>
<tbody>
<tr>
<td>a-češčri</td>
<td>ṭa-češčri-t</td>
</tr>
<tr>
<td>a-qayqun</td>
<td>ṭa-qayqun-t</td>
</tr>
<tr>
<td>a-rifi</td>
<td>ṭa-rifi-t</td>
</tr>
</tbody>
</table>

In a number of instances the male - female opposition is expressed by suppletive stems. No derivation by affix change is possible in such cases. The nouns can be of the Berber-morphology, the Arabic-morphology or the non-affix class, for example:

<table>
<thead>
<tr>
<th>M:SG(EL)</th>
<th>F:SG(EL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>a-lgaz</td>
<td>ṭa-lgaz-t</td>
</tr>
<tr>
<td>kma</td>
<td>utełma</td>
</tr>
<tr>
<td>a-seddu</td>
<td>le-bhima</td>
</tr>
<tr>
<td>žeddi</td>
<td>le-eziza</td>
</tr>
<tr>
<td>le-fhel</td>
<td>ta-sa</td>
</tr>
<tr>
<td>a-ferris</td>
<td>ṭa-fulis-t</td>
</tr>
<tr>
<td>a-qbay</td>
<td>ta-yať-t</td>
</tr>
<tr>
<td>a-tšk (~ l-yeštul)</td>
<td>ta-sekkur-t</td>
</tr>
<tr>
<td>a-lef</td>
<td>ta-muğa</td>
</tr>
</tbody>
</table>
Masculine – feminine gender derivation is used to indicate smaller and bigger size. In the semantic group of lower animals and inanimates, the feminine denotes an entity smaller than the masculine (for a general overview of diminutive types cf. III.3.2.). The basic noun can have the feminine or masculine form depending on the noun. If the basic noun is feminine the masculine forms the augmentative (cf. chapter III.3.5.). For example:

<table>
<thead>
<tr>
<th>M:SG:EL</th>
<th>F:SG:EL</th>
</tr>
</thead>
<tbody>
<tr>
<td>a-fentuṭ</td>
<td>ta-fentuṭ-t</td>
</tr>
<tr>
<td>a-maras</td>
<td>ta-maras-t</td>
</tr>
<tr>
<td>a-maleḥ</td>
<td>ta-maleḥ-t</td>
</tr>
<tr>
<td>a-kfer</td>
<td>ta-kfer-t</td>
</tr>
<tr>
<td>a-fentuṭ</td>
<td>‘lip’</td>
</tr>
<tr>
<td>ta-fentuṭ-t</td>
<td>‘small lip’</td>
</tr>
<tr>
<td>a-maras</td>
<td>‘valley, stream’</td>
</tr>
<tr>
<td>ta-maras-t</td>
<td>‘small valley, stream’</td>
</tr>
<tr>
<td>a-maleḥ</td>
<td>‘fish’</td>
</tr>
<tr>
<td>ta-maleḥ-t</td>
<td>‘small fish’</td>
</tr>
<tr>
<td>a-kfer</td>
<td>‘turtle’</td>
</tr>
<tr>
<td>ta-kfer-t</td>
<td>‘small turtle’</td>
</tr>
</tbody>
</table>

In two cases, the noun basis is altered by a gender alternation. In the first case the a changes position and the ending i is added. In the second case there is doubling of the first base consonant in the feminine counterpart.

<table>
<thead>
<tr>
<th>M:SG:EL</th>
<th>F:SG:EL</th>
</tr>
</thead>
<tbody>
<tr>
<td>a-fraṭ</td>
<td>ta-faṭi</td>
</tr>
<tr>
<td>a-taṛ</td>
<td>ta-taṛi</td>
</tr>
<tr>
<td>a-fraṭ</td>
<td>‘water pool’</td>
</tr>
<tr>
<td>ta-faṭi</td>
<td>‘small water pool’</td>
</tr>
<tr>
<td>a-taṛ</td>
<td>‘leg’</td>
</tr>
<tr>
<td>ta-taṛi</td>
<td>‘small leg’</td>
</tr>
</tbody>
</table>

Language names are in principle in Arabic, although occasionally the Berberised forms (on the right side) are used in a derogatory way to refer to the languages:

<table>
<thead>
<tr>
<th>F:SG</th>
<th>F:SG:EL</th>
</tr>
</thead>
<tbody>
<tr>
<td>ššelḥa</td>
<td>ta-šelḥi-t</td>
</tr>
<tr>
<td>lecarbiyya</td>
<td>ta-ceṛbi-t</td>
</tr>
<tr>
<td>‘Berber’</td>
<td>‘Berber’</td>
</tr>
<tr>
<td>‘Arabic’</td>
<td>‘Arabic’</td>
</tr>
</tbody>
</table>

The following feminine nouns have an idiosyncratic meaning:

<table>
<thead>
<tr>
<th>M:SG:EL</th>
<th>F:SG:EL</th>
</tr>
</thead>
<tbody>
<tr>
<td>a-sekkaw</td>
<td>ta-sekkaw-t</td>
</tr>
<tr>
<td>a-syar</td>
<td>ta-syar-t</td>
</tr>
<tr>
<td>‘horn’</td>
<td>‘goat fight’</td>
</tr>
<tr>
<td>‘stick’</td>
<td>‘right to a part’</td>
</tr>
</tbody>
</table>
There is a great deal of interaction between Arabic and Berber morphology in the domain of gender and other domains. This interaction will be discussed in more detail in chapter III.4.

1.1.2. Number

Number is established by agreement on the verb, the adjective, the participle or the (demonstrative) pronoun. The great majority of nouns (both Berber- and Arabic-morphology) allow for a singular – plural number opposition and will be discussed in the sections on morphology. Most Berber-morphology nouns express plural on the affixes, but there is a second category of apophonic plurals which expresses plural in the base. Arabic-morphology nouns also have external plurals (by means of suffixation) and internal plurals. Furthermore, there is a small group of non-affix nouns which express number either by suppletion or by suffixation. Some nouns do not have a number opposition; the singularia tantum and pluralia tantum. Singularia tantum are more frequent than pluralia tantum. Nouns that belong to these two categories have only one form, either a singular or a plural. For example in (1) the noun shows singular agreement, while in (2) the noun shows plural agreement:

(1) aḡ i-ll a-ywer mṭeḥteḥ
   PAST 3MS-be:P MS:EL-moon strong:PP:MS
   ‘The moon was very bright.’

(2) bb=d i-rd-en=i-hen
   bring:IMP=DC MPL:EL-barley-MPL=PL-ANP
   ‘Bring me the barley.’

1.1.2.1. Singularia tantum

The following list contains examples of nouns which are singular in form and agreement and do not have a plural counterpart. They are all non-count nouns. There are many nouns of this type especially in the domain of plant names. Both masculine and feminine gender nouns are included.

M:SG:EL

a-ḵal  ‘earth, soil’
a-ywer  ‘moon’
a-tīl  ‘grapes’
a-dlēs  ‘kind of plant’
a-tay  ‘tea’
1.1.2.2. Pluralia tantum

The following nouns are pluralia tantum. These nouns occur only in the plural form and include masculine and feminine nouns.

**M:PL:EL**
- *i-rd-en* ‘wheat’
- *a-m-an* ‘water’
- *i-bzaṅ-en* ‘beans’

**F:PL:EL**
- *ti-šuṣaf* ‘saliva’
- *ti-lḵam-an* ‘kind of spinach’
- *ti-meḵṛaṭ* ‘scissors’

1.1.3. State

The Berber noun has two basic state distinctions, a free state (henceforth EL = Etat Libre) and an annexed state (henceforth EA = Etat d’Annexion\(^{20}\)). The EL is the citation form. The difference of state is marked by a change in the nominal prefix. In Ghomara Berber the use of the EA is more restricted than in many other Berber languages. The EA only occurs after prepositions and after the numeral *yan* / *yat* ‘one’. In the following examples there is a change of the prefix from *a* > *u* in the masculine in example one and from *ta- > t- in the feminine in example (4)\(^{21}\):

(3) \(i-ḡḡ= ah\)en \(g\) \(u-\)qemmum \(nn\)-es \((EL = aqemmum)\)

3MS-do:P = S:ANP in MS:EA-mouth of-3MS

‘He put them in his mouth.’

---

\(^{20}\) The labels are based on the French tradition in Berberology. For a discussion of these the states see the seminal article by Lionel Galand (2002 [1964]: 287-308).

\(^{21}\) Both numerals have other allomorphs, which are *ya* for masculine and *yat ~ ya* for feminine (cf. III.12.1.2. on numerals).
1.2. The prefix

Of a total of 424 masculine singular Berber-morphology nouns in our corpus the vast majority of masculine singular nouns (about 90%) takes an a- prefix in the EL and an u- prefix in the EA. There are 19 masculine singular nouns which have the prefix wa- in the EA. A smaller group, consisting of only four nouns, has free variation between wa- ~ ya- and one noun has the prefix ya- in the EA. Four nouns have free variation of the prefix u- ~ i- in the EA. A number of nouns take the prefix i- and one noun has a prefix u- in the EA. In the EA the i- and the u- prefix do not change. All masculine plural nouns have an i- prefix which never makes a state distinction.

Our corpus contains 378 feminine Berber-morphology nouns. The vast majority of feminine nouns (about 90%) are marked by the prefix ta- in the singular and the prefix ti- in the plural. In the EA the vowel of the prefix is absent. There is a group of nouns (about 10%) which form an exception. A couple of feminine nouns have a prefix ta- that marks both the singular and the plural. Within this group some nouns do not distinguish state, i.e. the ta- prefix does not change. In addition there are a couple of nouns which have a ti- prefix in the singular. Nouns that take the prefix ti- do not mark state. Schematically this can be summarised as follows:

<table>
<thead>
<tr>
<th>EL</th>
<th>Example</th>
<th>EA</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>M:SG</td>
<td>a-</td>
<td>a-</td>
<td>u-</td>
</tr>
<tr>
<td>a-</td>
<td>a-dfel</td>
<td>u- ~ i-</td>
<td>u-dfel ~ i-dfel</td>
</tr>
<tr>
<td>a-</td>
<td>a-sif</td>
<td>wa-</td>
<td>wa-sif</td>
</tr>
<tr>
<td>a-</td>
<td>a-yil</td>
<td>wa- ~ ya-</td>
<td>wa-yil ~ ya-yil</td>
</tr>
<tr>
<td>i-</td>
<td>i-les</td>
<td>-</td>
<td>i-les</td>
</tr>
<tr>
<td>u-</td>
<td>u-l</td>
<td>-</td>
<td>u-l</td>
</tr>
<tr>
<td>M:PL</td>
<td>i-</td>
<td>i-</td>
<td>i-</td>
</tr>
<tr>
<td>i-</td>
<td>i-muras</td>
<td>i-</td>
<td>i-muras</td>
</tr>
<tr>
<td>F:SG</td>
<td>ta-</td>
<td>t-</td>
<td>t-fellun-t</td>
</tr>
<tr>
<td>ta-</td>
<td>ta-la</td>
<td>ta-</td>
<td>ta-la</td>
</tr>
<tr>
<td>ti-</td>
<td>ti-rg-et</td>
<td>ti-</td>
<td>ti-rg-et</td>
</tr>
<tr>
<td>F:PL</td>
<td>ti-</td>
<td>t-</td>
<td>t-zugg-an</td>
</tr>
<tr>
<td>ti-</td>
<td>ti-rg-an</td>
<td>ti-</td>
<td>ti-rg-an</td>
</tr>
<tr>
<td>ta-</td>
<td>ta-ziw-an</td>
<td>t-</td>
<td>t-ziw-an</td>
</tr>
<tr>
<td>ta-</td>
<td>ta-liw-an</td>
<td>ta-</td>
<td>ta-liw-an</td>
</tr>
</tbody>
</table>
1.2.1. The *voyelle constante*

The vowel of the prefix changes in the EA and in the plural of most nouns, however a small number of nouns have a prefix vowel that does not change. Traditionally, this unchanging vowel is called the *voyelle constante* in the French Berberological tradition. It does not change in the EA nor in the plural. For Aït Ndhir Berber, Penchoen (1973:7) has proposed to reinterpret the non-changing vowel as part of the base instead of a separate prefix. Thus in his view there is a distinction between vowel-initial and consonant-initial noun bases which is reflected in the EA. For Ghomara the *voyelle constante* can be maintained in the masculine singular, but not in the masculine plural. The masculine plural marker is *i*- for all nouns. Therefore we assume that masculine singular nouns have two prefixes *u*- and *wa*- in the EA which are replaced by *i*- in the plural. For the feminine the situation is somewhat different. The majority of nouns have singular *ta*- and plural *ti*- in the EL and *t*- in the EA, while a minority has a *voyelle constante* *ta*- or *ti*- that does not change in the EA nor in the plural (with the exception of some *ta*- prefixes which change to *t*- in the EA plural). However, we will not consider the vowel to be part of the base in order to maintain the symmetry of prefixes. In the following part the morphology of state distinctions will be presented on the basis of gender and number heads.

1.2.2. Masculine singular

The great majority of masculine singular nouns (424 in our corpus) within the Berber-morphology nouns have the prefix *a*- in the EL and *u*- in the EA. For example:

<table>
<thead>
<tr>
<th>M:SG:EL</th>
<th>M:SG:EA</th>
</tr>
</thead>
<tbody>
<tr>
<td>a-maras</td>
<td>u-maras</td>
</tr>
<tr>
<td>a-myar</td>
<td>u-myar</td>
</tr>
<tr>
<td>a-makar</td>
<td>u-makar</td>
</tr>
<tr>
<td>a-syar</td>
<td>u-syar</td>
</tr>
<tr>
<td>a-zrру</td>
<td>u-zrру</td>
</tr>
</tbody>
</table>

The EL prefix *u*- becomes *w*- when immediately preceded by a vowel, for example by the numeral *ya(n)* ‘one’.

*ya w-maras* ‘one valley’
*ya w-rheb* ‘one big piece of land’

A small set of nouns has free variation between a prefix vowel *u*- and *i*- in the EA. The noun *a-ȝert ~ a-yģert* only allows for the prefix vowel *i*. All these nouns consist of a base with three consonant and no plain vowel.
A group of 19 nouns in the corpus mark the EA by means of the prefix `wa-`, for example:\(^{22}\):

<table>
<thead>
<tr>
<th>M:SG:EL</th>
<th>M:SG:EA</th>
</tr>
</thead>
<tbody>
<tr>
<td>a-ɣlel</td>
<td>i-ɣlel ~ u-ɣlel</td>
</tr>
<tr>
<td>a-dfel</td>
<td>i-dfel ~ u-dfel</td>
</tr>
<tr>
<td>a-xref</td>
<td>i-xref ~ u-xref</td>
</tr>
<tr>
<td>a-ɖles</td>
<td>i-ɖles ~ u-ɖles</td>
</tr>
<tr>
<td>a-ɣerṭ ~ a-ɣerṭ</td>
<td>i-ɣerṭ</td>
</tr>
</tbody>
</table>

The noun `aɣlef` ‘cattle’ has the same morphology but has plural agreement\(^{23}\). In addition, it has a variant which has the prefix `w-`:

<table>
<thead>
<tr>
<th>M:SG:EL</th>
<th>M:SG:EA</th>
</tr>
</thead>
<tbody>
<tr>
<td>a-ɣlef</td>
<td>wa-ɣlef</td>
</tr>
</tbody>
</table>

A few nouns allow for free variation in the EA between the prefix `wa-` and a prefix `ya-`.

These are all the nouns of this type in our corpus.

<table>
<thead>
<tr>
<th>M:SG:EL</th>
<th>M:SG:EA</th>
</tr>
</thead>
<tbody>
<tr>
<td>a-yed</td>
<td>wa-yed ~ ya-yed</td>
</tr>
<tr>
<td>a-ɬem</td>
<td>wa-ɬem ~ ya-ɬem</td>
</tr>
<tr>
<td>a-yil</td>
<td>wa-yil ~ ya-yil</td>
</tr>
<tr>
<td>a-ɬef</td>
<td>wa-ɬef ~ ya-ɬef</td>
</tr>
</tbody>
</table>

There is one noun which takes only the `ya-` prefix in the EA.


\(^{23}\) In the Bni Menṣur dialect of Ghomara it is `aɬef` (El Hannouche 2010: 278).

\(^{24}\) The latter version is phonologically `/u-yeffet/ ‘cattle’.`
Some nouns have i- as a prefix vowel in the singular. The form of the prefix does not change in the EA. These are all the nouns of this type in our corpus:

<table>
<thead>
<tr>
<th>M:SG:EL</th>
<th>M:SG:EA</th>
</tr>
</thead>
<tbody>
<tr>
<td>a-ğer</td>
<td>ya-ğer</td>
</tr>
<tr>
<td>ipzi</td>
<td>ipzi</td>
</tr>
<tr>
<td>ipḏeɣ</td>
<td>ipḏeɣ</td>
</tr>
<tr>
<td>ipnaɣ</td>
<td>ipnaɣ</td>
</tr>
<tr>
<td>iples</td>
<td>iples</td>
</tr>
</tbody>
</table>

One noun in the corpus starts in u-. This noun does not mark the EA and does not have a plural form.

<table>
<thead>
<tr>
<th>M:SG:EL</th>
<th>M:SG:EA</th>
</tr>
</thead>
<tbody>
<tr>
<td>u-l</td>
<td>u-l</td>
</tr>
</tbody>
</table>

1.2.3. Masculine plural

Masculine plural nouns take the prefix i- regardless of the form of the singular masculine prefix.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a-maras</td>
<td>u-maras</td>
<td>i-muras</td>
</tr>
<tr>
<td>a-myar</td>
<td>u-myar</td>
<td>i-myar-en</td>
</tr>
<tr>
<td>a-maḵar</td>
<td>u-maḵar</td>
<td>i-muḵar</td>
</tr>
<tr>
<td>a-syar</td>
<td>u-syar</td>
<td>i-syar-en</td>
</tr>
<tr>
<td>a-mmahr</td>
<td>wa-mmahr</td>
<td>i-mmira</td>
</tr>
<tr>
<td>a-lef</td>
<td>wa-lef</td>
<td>i-lf-an</td>
</tr>
</tbody>
</table>

In the masculine plural, state is not marked. The initial prefix vowel i- does not change its form when following a preposition.

<table>
<thead>
<tr>
<th>M:PL</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>i-muras</td>
<td>bezzaf n i-muras</td>
</tr>
</tbody>
</table>

---

25 In the dialect of the village Amṭiqan in the Ghomara Berber speaking region the plural of u-l is u-liy-en (see El Hannouche, 2008: 61).
1.2.4. Feminine singular

Most feminine singular nouns have the prefix ta- in the EL with a corresponding form t- in the EA.

<table>
<thead>
<tr>
<th>F:SG:EL</th>
<th>F:SG:EA</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ta-zref-t</td>
<td>t-ezref-t</td>
<td>‘small road’</td>
</tr>
<tr>
<td>ta-mda</td>
<td>t-emda</td>
<td>‘lake’</td>
</tr>
<tr>
<td>ta-zgha</td>
<td>t-ezgha</td>
<td>‘forest’</td>
</tr>
<tr>
<td>ta-fellun-t</td>
<td>t-fellun-t</td>
<td>‘frying pan’</td>
</tr>
<tr>
<td>ta-mugnan-t</td>
<td>t-mugnan-t</td>
<td>‘boiled egg’</td>
</tr>
<tr>
<td>ta-nda</td>
<td>t-mnda</td>
<td>‘sow’</td>
</tr>
</tbody>
</table>

In a small number of feminine singular nouns the prefix ta- remains the same in the EA.

<table>
<thead>
<tr>
<th>F:SG:EL</th>
<th>F:SG:EA</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ta-yil-t</td>
<td>ta-yil-t</td>
<td>‘small mountain’</td>
</tr>
<tr>
<td>ta-sif-t</td>
<td>ta-sif-t</td>
<td>‘small river’</td>
</tr>
<tr>
<td>ta-la</td>
<td>ta-la</td>
<td>‘water spring’</td>
</tr>
</tbody>
</table>

There are a few feminine singular nouns that have a prefix ti-. The vowel is preserved in the EA.

<table>
<thead>
<tr>
<th>F:SG:EL</th>
<th>F:SG:EA</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ti-tt</td>
<td>ti-tt</td>
<td>‘eye’</td>
</tr>
<tr>
<td>ti-tta</td>
<td>ti-tta</td>
<td>‘nipple’</td>
</tr>
<tr>
<td>ti-smet</td>
<td>ti-smet</td>
<td>‘cold’</td>
</tr>
<tr>
<td>ti-dda</td>
<td>ti-dda</td>
<td>‘leech’</td>
</tr>
</tbody>
</table>

1.2.5. Feminine plural

The main feminine plural prefix is ti-. Most feminine nouns take this plural prefix. The vowel of the plural prefix is absent in the EA.

<table>
<thead>
<tr>
<th>F:PL:EL</th>
<th>F:PL:EA</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ti-zurfawt-an</td>
<td>t-zurfawt-an</td>
<td>‘small roads’</td>
</tr>
</tbody>
</table>

26 The other feminine singular nouns which have a ti- prefix are: tirgett ‘embers’, tikkuk ‘bird’ (sp.), tilket ‘head louse’, tiziq ‘fly’ (sp.), tiqelt ‘woods’, timegrat ‘scissors’, tidert ‘ear’, tiskert ‘garlic’, tizelt ‘berry’ (sp.).
A handful of feminine nouns retain the singular ta- in the plural, but drop the prefix vowel in the EA of both numbers. These are all examples in our corpus:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ta-kna</td>
<td>t-eğna</td>
<td>ta-ğer-an</td>
<td>t-eğer-an</td>
</tr>
<tr>
<td>ta-ça</td>
<td>t-ça</td>
<td>ta-çw-an</td>
<td>t-çw-an</td>
</tr>
<tr>
<td>ta-ylal-t</td>
<td>t-ylal-t</td>
<td>ta-ylal-an</td>
<td>t-ylal-an</td>
</tr>
<tr>
<td>ta-rțiw-t</td>
<td>t-ertiw-t</td>
<td>ta-rțiw-an</td>
<td>t-ertiw-an</td>
</tr>
</tbody>
</table>

Some feminine nouns with prefix ta- or ti- in the singular retain the prefix in the plural, and retain the prefix vowel in the EA of both numbers.

<table>
<thead>
<tr>
<th>F:SG:EL = EA</th>
<th>F:PL:EL = EA</th>
</tr>
</thead>
<tbody>
<tr>
<td>ta-yił-t</td>
<td>ta-yił-an</td>
</tr>
<tr>
<td>ta-sif-t</td>
<td>ta-sif-ťan</td>
</tr>
<tr>
<td>ta-la</td>
<td>ta-liw-an</td>
</tr>
<tr>
<td>ta-yt</td>
<td>ta-yțw-an</td>
</tr>
<tr>
<td>ta-fuķ-t</td>
<td>ta-fuķ-an</td>
</tr>
<tr>
<td>ti-lk-et</td>
<td>ti-lk-an</td>
</tr>
<tr>
<td>ti-rģ-et</td>
<td>ti-rģ-an</td>
</tr>
</tbody>
</table>

Two nouns only mark the EA in the plural but not in the singular:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ti-dda</td>
<td>ti-dda</td>
<td>ti-dđiw-an</td>
<td>t-edđiw-an</td>
</tr>
<tr>
<td>ti-tť</td>
<td>ti-tť</td>
<td>ti-tțiiw-an</td>
<td>te-țțiiw-an</td>
</tr>
</tbody>
</table>

1.3. The base and the suffix

In the previous paragraph we have seen that prefixes are portmanteau morphemes which express gender, number and state. In addition, many nouns have suffixes which express gender and number. There are two feminine singular suffixes, one masculine plural suffix and one suffix which expresses both feminine and masculine plural. Most feminine singular nouns (about 90%) take the suffix -t (after base-final consonants) or -ť (after base-final vowels) while a minority (about 3%) of feminine singular nouns take the suffix -et (after
base-final consonants) or -t (after base final vowels). Five feminine singular nouns in our corpus have a base extension +ḵ. A number of feminine singular nouns (about 7%) does not take a suffix at all. All these noun bases end in a. Masculine singular nouns do not take suffixes (except for augmentatives, see III.3.5.). Many masculine plural nouns (about 55%) take the suffix -en while a minority of these nouns (about 8%) take -an. Four masculine nouns in our corpus have a base extension +aw before suffix -en in the plural. Two masculine nouns add +y before the plural suffix -en and one noun adds +w before the same suffix. Many feminine nouns (about 68%) take the plural suffix -an which is sometimes combined with a base extension.

This can be schematically summarised as follows:

<table>
<thead>
<tr>
<th>Suffix</th>
<th>Value</th>
<th>Change of base</th>
</tr>
</thead>
<tbody>
<tr>
<td>-t ~ -t</td>
<td>F:SG</td>
<td>- five nouns with base extension +ḵ</td>
</tr>
<tr>
<td>-et ~ -t</td>
<td>F:SG</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>-en</td>
<td>M:PL</td>
<td>- Four nouns with extension +aw, two with +y, one with +w</td>
</tr>
<tr>
<td>-an</td>
<td>M:PL / F:PL</td>
<td>- Masculine nouns base-final vowel is apocopated</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Some feminine nouns have one of the extensions +iw, +t, +at, +tw, +aw.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Change of base forms of some nouns</td>
</tr>
</tbody>
</table>

Some nouns suppress a vowel or degeminate a consonant in the plural. Some nouns which have a CVC-base in the singular geminate the final consonant in the plural, and finally there are a number of otherwise irregular plural nouns. In this paragraph we will discuss each of the suffixes and their interaction with the base.

### 1.3.1. The suffix -t ~ -ᵗ ‘feminine singular’

Approximately 90% of the feminine Berber nouns in our corpus have feminine singular suffix -t ~ -ᵗ. A noun base that ends in a consonant is followed by -t, while a noun base that ends in a vowel is followed by -ᵗ (see II.1.10. on spirantisation). For example:

- **-t**
  - F:SG:EL
  - *ta-meilaq*-t
  - ‘spoon’
  - *ta-maras*-t
  - ‘little valley’

- **-ᵗ**
The following nouns have a base extension +عكس when the noun gets a suffix. The first two nouns on the left side are collective nouns with Arabic morphology, the third noun is a masculine singular Berber noun. We have put them on the left side in order to compare them with the feminine nouns on the right that get a base extension +عكس.

M:SG(EL)  F:SG:EL

<table>
<thead>
<tr>
<th>M:SG(EL)</th>
<th>F:SG:EL</th>
</tr>
</thead>
<tbody>
<tr>
<td>ssfenġ</td>
<td>ta-sfenġe + k-t</td>
</tr>
<tr>
<td>šmuṛṛa</td>
<td>ta-šmuṛṛe + k-t</td>
</tr>
<tr>
<td>a-malu</td>
<td>ta-malu + k-t</td>
</tr>
<tr>
<td>a-беṛṛey</td>
<td>ta-беṛṛe + k-t</td>
</tr>
</tbody>
</table>

One internal diminutive of a feminine noun gets a base extension +عكس (cf. chapter III.3.2. for internal diminutives):

F:SG:EL  F:SG:EL

<table>
<thead>
<tr>
<th>F:SG:EL</th>
</tr>
</thead>
<tbody>
<tr>
<td>ta-ģnaw-t</td>
</tr>
</tbody>
</table>

1.3.2. The suffix -et ~ -t ‘feminine singular’

The other feminine singular suffix is -et. A small minority of the feminine nouns (about 3%) which have a base-final consonant take this suffix. Some examples are:

F:SG:EL

<table>
<thead>
<tr>
<th>F:SG:EL</th>
</tr>
</thead>
<tbody>
<tr>
<td>ti-rg-et</td>
</tr>
<tr>
<td>ta-rqie-et</td>
</tr>
<tr>
<td>ta-mušš-et</td>
</tr>
</tbody>
</table>

In a few cases the suffix appears after a base-final vowel a. We consider -t in these instances an allomorph of -et. Note that the regular suffix -t ~ -t always has the fricative -ت after a final vowel. These are all the nouns in our corpus:

F:SG:EL

<table>
<thead>
<tr>
<th>F:SG:EL</th>
</tr>
</thead>
<tbody>
<tr>
<td>ta-rba-t</td>
</tr>
<tr>
<td>ta-qaha-t</td>
</tr>
</tbody>
</table>

27 There is no assimilation يت > كت.
In our corpus about 6% of the feminine nouns do not have a feminine suffix. All these nouns have a base ending in a. The plural of most of these nouns has a base extension -iw.

**F:SG:EL**

- ta-
  - mda → ‘lake’
- ta-
  - mya → ‘throat’
- ti-
  - ḍda → ‘leeche’

1.3.3. The suffix -en ‘masculine plural’

The suffix -en is the most frequent suffix marker of masculine plural nouns. 54% of the masculine nouns takes this plural suffix, for example:

<table>
<thead>
<tr>
<th>M:SG:EL</th>
<th>M:PL:EL</th>
</tr>
</thead>
<tbody>
<tr>
<td>a-rgaz</td>
<td>i-rgaz-en</td>
</tr>
<tr>
<td>a-rrar</td>
<td>i-rrar-en</td>
</tr>
<tr>
<td>a-żennit</td>
<td>i-żennit-en</td>
</tr>
<tr>
<td>a-fraḡ</td>
<td>i-fraḡ-en</td>
</tr>
</tbody>
</table>

In four cases the base is extended by an element +aw which precedes the masculine plural suffix -en. All attested nouns have a ccc base:

<table>
<thead>
<tr>
<th>M:SG:EL</th>
<th>M:PL:EL</th>
</tr>
</thead>
<tbody>
<tr>
<td>a-zref</td>
<td>i-zref + aw-en (~ i-zerf-an)</td>
</tr>
<tr>
<td>a-ĝerṭ</td>
<td>i-ĝerṭ + aw-en</td>
</tr>
<tr>
<td>a-ṛṣet</td>
<td>i-ṛṣet + aw-en</td>
</tr>
<tr>
<td>a-ṛḥeb</td>
<td>i-ṛḥeb + aw-en</td>
</tr>
</tbody>
</table>

The following two nouns have base extension -y in the plural.

<table>
<thead>
<tr>
<th>M:SG:EL</th>
<th>M:PL:EL</th>
</tr>
</thead>
<tbody>
<tr>
<td>a-messaki</td>
<td>i-messaki + y-en</td>
</tr>
<tr>
<td>a-yumṛi</td>
<td>i-yumṛi + y-en(^{28})</td>
</tr>
</tbody>
</table>

\(^{28}\) This plural has the free variants i-yumṛ-an ~ i-yumṛa ‘corners’.
One noun adds +w to the base when followed by -en.

**M:SG:EL** **M:PL:EL**
a-senslu i-senslu + w-en ‘spine’

There is one single feminine noun which takes the masculine plural suffix -en²⁹. Furthermore there are several nouns without affixes in the singular which form a separate group (cf. III.5.).

**F:SG:EL** **F:PL:EL**
ta-yat-t ti-yaṭṭ-en ‘goat’

### 1.3.4. The suffix -an ‘masculine or feminine plural’

The suffix -an marks both masculine and feminine plurality. Only a minority of masculine nouns, approximately 8%, take this suffix, for example:

**M:SG:EL** **M:PL:EL**
a-ḵmez i-ḵemz-an ‘nail’
a-tuḡd i-tuḡd-an ‘finger’
a-lef i-lf-an ‘boar’

The final base vowel of the singular noun is dropped in the plural, for example:

**M:SG:EL** **M:PL:EL**
i-zi i-z-an ‘fly’
a-ẓṛu i-ẓr-an ‘stone’
a-sla i-sl-an ‘bride groom’
a-ḡḍi i-gḍ-an ‘jackal’
a-werdu i-werd-an ‘louse’

The suffix -an is the regular marker with feminine plural nouns. Most feminine nouns take -an without any change in the noun base, as exemplified in the following singular - plural pairs:

---

²⁹ In many Berber languages this particular word forms an exception with respect to its plural suffix, e.g. Eastern Riffian SG. täṭṭ PL täṭṭen, Beni Snous täṭṭ - täṭṭen, Ait Seghrouchen täṭṭ - täṭṭen, (Kossmann, 2000:33).
In a number of cases the plural suffix -an is preceded by a base extension. The base extensions are +iw, +t, +at and +tw. Below we present some examples, beginning with the most frequently occurring base extension. All singular nouns that have a base-final a get a base extension +iw when the plural suffix is added. The final vowel is deleted. Some nouns have an irregular vowel change, whereas in one noun the geminated consonant is reduced to a single one.

One noun with this base extension does not have base-final a.

A number of nouns have the base extension +t and +at in the plural. It could be argued that in addition to the suffix -an there exists a feminine suffix -tan. However, in view of the rarity of the two base extensions (29 x +t, 20 x +at) we prefer to consider these elements +t and +at base extensions, thereby maintaining a single feminine plural suffix -an. Some examples of nouns which take +t base extensions are:

---

30 Younger speakers omit the prefix in the plural which results in the form ṭṭiwan 'eyes'.
These are some examples of feminine nouns which end in -\textit{at}. This suffix is always preceded by a cluster of two or three consonants.

<table>
<thead>
<tr>
<th>Feminine Noun</th>
<th>Base Extension + +t-</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>ta-sla-t</td>
<td>ti-sla + t-an</td>
<td>‘bride’</td>
</tr>
<tr>
<td>ta-mazir-t</td>
<td>ti-mazir + t-an</td>
<td>‘land’</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F:SG:EL</td>
<td>F:PL:EL</td>
<td></td>
</tr>
<tr>
<td>ta-nyur-t</td>
<td>ti-nyur + at-an</td>
<td>‘stable’</td>
</tr>
<tr>
<td>ta-frux-t</td>
<td>ti-ferx + at-an</td>
<td>‘small chicken’</td>
</tr>
<tr>
<td>ta-zezzer-t</td>
<td>ti-zezzr + at-an</td>
<td>‘pitchfork’</td>
</tr>
<tr>
<td>ta-ayerdm-t</td>
<td>ti-ayerdm + at-an</td>
<td>‘scorpion’</td>
</tr>
<tr>
<td>ta-kher-t</td>
<td>ti-kebr + at-an</td>
<td>‘woolen djellaba’</td>
</tr>
</tbody>
</table>

Some forms with the base extension +t are in free variation with forms that do not have a base extension. The geminate \textit{ll} is degeminated when the base extension is added, for example:

<table>
<thead>
<tr>
<th>Feminine Noun</th>
<th>Base Extension + +t-</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F:SG:EL</td>
<td>F:PL:EL</td>
<td></td>
</tr>
<tr>
<td>ta-rbib-t</td>
<td>ti-rbib-an \sim ti-rbib + t-an</td>
<td>‘stepdaughter’</td>
</tr>
<tr>
<td>ta-yil-t</td>
<td>ta-yill-an \sim ta-yil + t-an</td>
<td>‘small hill’</td>
</tr>
</tbody>
</table>

There is one noun that has a final -\textit{et} suffix that takes a base extension +t in the plural.

<table>
<thead>
<tr>
<th>Feminine Noun</th>
<th>Base Extension + +t-</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F:SG:EL</td>
<td>F:PL:EL</td>
<td></td>
</tr>
<tr>
<td>ta-fx-et</td>
<td>ti-fex + t-an</td>
<td>‘calf of the leg’</td>
</tr>
</tbody>
</table>

The base extension -\textit{tw} occurs once:

<table>
<thead>
<tr>
<th>Feminine Noun</th>
<th>Base Extension + +t-</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F:SG:EL</td>
<td>F:PL:EL</td>
<td></td>
</tr>
<tr>
<td>t-ay-t</td>
<td>t-ay + tw-an</td>
<td>‘shoulder’</td>
</tr>
</tbody>
</table>

A combination of the base extensions +aw and +t is also found once:

<table>
<thead>
<tr>
<th>Feminine Noun</th>
<th>Base Extension + +t-</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F:SG:EL</td>
<td>F:PL:EL</td>
<td></td>
</tr>
<tr>
<td>ta-zref-t</td>
<td>ti-zref + aw + t-an</td>
<td>‘small road’</td>
</tr>
</tbody>
</table>

The two feminine nouns that have a base extension +k in the singular have the same
extension in the plural.

\[
\begin{array}{ll}
\text{F:SG:EL} & \text{F:PL:EL} \\
\text{ta-sfen\=g + e\=k-t} & \text{ti-sfen\=g + k-an} & \text{‘donut’} \\
\text{ta-\=smu\=r + e\=k-t} & \text{ti-\=smu\=r + k-an} & \text{‘cactus fruit’}
\end{array}
\]

1.3.5. Change without base extension

Several nouns which take the plural affixes -en or -an suppress a vowel or undo gemination in the base. The resulting plural base has ccc-structure if the base has three consonants, for example:

The suffix -en

\[
\begin{array}{ll}
\text{M:SG:EL} & \text{M:PL:EL} \\
a-\text{fra\=t} & i-\text{fer\=t-en} & \text{‘water pool’} \\
a-\text{yi\=zd} & i-\text{ye\=z-d-en} & \text{‘billy goat’} \\
a-\text{\=hezzum} & i-\text{\=hezm-en} & \text{‘collection of fire wood’} \\
a-\text{ge\=zdir} & i-\text{ge\=zdr-en} & \text{‘kind of lizard’}
\end{array}
\]

The following noun has degemination of \text{ww} resulting in \text{ew} \rightarrow \text{u} in the plural.

\[
a-\text{\=tewwwal} & i-\text{\=tulan} & \text{‘son-in-law’}
\]

One noun which has two plurals which are in free variation, one of which retains the geminate consonant.

\[
a-\text{\=set\=tib} & i-\text{\=set\=b-en} \sim i-\text{\=set\=tib-en} & \text{‘small bush’}
\]

The suffix -an

\[
\begin{array}{ll}
\text{M:SG:EL} & \text{M:PL:EL} \\
a-\text{frux} & i-\text{ferx-an} & \text{‘boy, small bird’} \\
a-\text{zemmur} & i-\text{zemr-an} & \text{‘wild olive’}
\end{array}
\]

\[
\begin{array}{ll}
\text{F:SG:EL} & \text{F:PL:EL} \\
ta-\text{\=e\=re\=t-t} & ti-\text{\=e\=re\=t-an} & \text{‘wooden lock’}
\end{array}
\]

The following example has a degemination and depharyngealisation of the consonant \text{\=zz} in the plural.

\[
a-\text{mezzu\=g} & i-\text{mezg-an} \sim i-\text{mezza\=g} & \text{‘ear’}
\]

80
The suppression of a vowel or gemination is not obligatory, e.g.

<table>
<thead>
<tr>
<th>F:SG:EL</th>
<th>F:PL:EL</th>
</tr>
</thead>
<tbody>
<tr>
<td>ta-sekkur-t</td>
<td>ti-sukr-an²¹</td>
</tr>
<tr>
<td></td>
<td>‘partridge’</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>M:SG:EL</th>
<th>M:PL:EL</th>
</tr>
</thead>
<tbody>
<tr>
<td>a-tuɡd</td>
<td>i-tuɡd-an</td>
</tr>
<tr>
<td></td>
<td>‘finger’</td>
</tr>
<tr>
<td>a-temmar</td>
<td>i-temmar-an (~ i-temmira)</td>
</tr>
<tr>
<td></td>
<td>‘liar’</td>
</tr>
</tbody>
</table>

Some nouns which have a cvc-base geminate the final consonant of the base. The base vowel changes to a (or e in one case), for example:

<table>
<thead>
<tr>
<th>M:SG:EL</th>
<th>M:PL:EL</th>
</tr>
</thead>
<tbody>
<tr>
<td>a-fus</td>
<td>i-fass-en</td>
</tr>
<tr>
<td></td>
<td>‘hand’</td>
</tr>
<tr>
<td>a-dem</td>
<td>i-damm-en</td>
</tr>
<tr>
<td></td>
<td>‘blood’</td>
</tr>
<tr>
<td>a-sif</td>
<td>i-saff-en</td>
</tr>
<tr>
<td></td>
<td>‘river’</td>
</tr>
<tr>
<td>a-yil</td>
<td>i-yall-en</td>
</tr>
<tr>
<td></td>
<td>‘mountains’</td>
</tr>
<tr>
<td>a-faf</td>
<td>i-faff-en (~ i-feff-en)</td>
</tr>
<tr>
<td></td>
<td>‘nipple’</td>
</tr>
</tbody>
</table>

Other nouns with the same base structure do not show such changes in the plural, for example:

<table>
<thead>
<tr>
<th>M:SG:EL</th>
<th>M:PL:EL</th>
</tr>
</thead>
<tbody>
<tr>
<td>a-nas</td>
<td>i-nasen</td>
</tr>
<tr>
<td></td>
<td>‘sparkle’</td>
</tr>
<tr>
<td>i-nay</td>
<td>i-nayen</td>
</tr>
<tr>
<td></td>
<td>‘palate’</td>
</tr>
<tr>
<td>a-ṭar</td>
<td>i-ṭar-en</td>
</tr>
<tr>
<td></td>
<td>‘bird’ (sp.)</td>
</tr>
</tbody>
</table>

A few irregular nouns show changes in the base in combination with affixation in the plural.

<table>
<thead>
<tr>
<th>M:SG:EL</th>
<th>M:PL:EL</th>
</tr>
</thead>
<tbody>
<tr>
<td>a-zeptka</td>
<td>i-ṣukk-an²²</td>
</tr>
<tr>
<td></td>
<td>‘tomb’</td>
</tr>
<tr>
<td>a-muxxed</td>
<td>i-muxd-en²³</td>
</tr>
<tr>
<td></td>
<td>‘wild cat’</td>
</tr>
<tr>
<td>a-ẓar</td>
<td>i-ẓur-an</td>
</tr>
<tr>
<td></td>
<td>‘root, muscle’</td>
</tr>
</tbody>
</table>

²¹ The u is possibly labialisation of the kk and ḵ. This cannot be established because of the position of the u (cf. II.4. phonology for discussion of the problem).
²² The u might be labialisation of the consonant kk, i.e. /i-ţekk-an/.
²³ The u might be labialisation of the consonant xx, i.e. /a-mexx̚-ed/, /i-mex̚-d-en/.
1.4. Apophonic plurals

Apophonic plural bases are formed by a vowel change of the singular base (in combination with the change of the prefix). These type of nouns do not take a plural suffixes. Apophonic plurals comprise about 17% of the total plurals. There exist two categories of apophonic plurals. The first type has an i preceding the base-final consonant and an a in final position. About 6% of the plurals is of this type. An i is inserted before the final consonant. If the base-final vowel is already i, only a is added to the base. Most of the singular bases have cCvc or cvCvc structure. Examples:

<table>
<thead>
<tr>
<th>M:SG:EL</th>
<th>M:PL:EL</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a-teṛraš</td>
<td>i-teṛrša</td>
<td>‘jar’</td>
</tr>
<tr>
<td>a-sennaž</td>
<td>i-šenniža</td>
<td>‘basket’</td>
</tr>
<tr>
<td>a-tewwiš</td>
<td>i-tewwiša</td>
<td>‘rain-pipe’</td>
</tr>
<tr>
<td>a-cukkas</td>
<td>i-cukkiza</td>
<td>‘walking stick’</td>
</tr>
<tr>
<td>a-tebban</td>
<td>i-tebbina</td>
<td>‘trousers’</td>
</tr>
<tr>
<td>a-rappaš</td>
<td>i-rappiša</td>
<td>‘hat’</td>
</tr>
<tr>
<td>a-ḥettaš</td>
<td>i-ḥettiša</td>
<td>‘slash’</td>
</tr>
<tr>
<td>a-ğellu (~ a-wellu)</td>
<td>i-ğellwa (~i-wellwa)</td>
<td>‘plough’</td>
</tr>
<tr>
<td>a-rekkal</td>
<td>i-rekkila</td>
<td>‘dog’</td>
</tr>
<tr>
<td>a-qeṛraš</td>
<td>i-qeṛriša</td>
<td>‘leaf of cactus plant’</td>
</tr>
<tr>
<td>a-newwal</td>
<td>i-newwiša</td>
<td>‘hut’</td>
</tr>
<tr>
<td>a-mmam</td>
<td>i-mmira</td>
<td>‘big beard’</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>F:SG:EL</th>
<th>F:PL:EL</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ta-muggas-t</td>
<td>ti-muggiza</td>
<td>‘stick (type)’</td>
</tr>
<tr>
<td>ta-rekkal-t</td>
<td>ti-rekkila</td>
<td>‘bitch’</td>
</tr>
<tr>
<td>ta-kemmar-t</td>
<td>ti-šemmiša</td>
<td>‘face’</td>
</tr>
<tr>
<td>ta-kewwar-t</td>
<td>ti-şewwiša</td>
<td>‘roll’</td>
</tr>
<tr>
<td>ta-rappaš-t</td>
<td>ti-rappiša</td>
<td>‘hat’</td>
</tr>
<tr>
<td>ta-żellab-t</td>
<td>ti-żelliša</td>
<td>‘djellaba’</td>
</tr>
</tbody>
</table>
The second category consists of several types. About 11% of the plurals form their plural in this way. There are two basic patterns which make an apophonic plural of this type.

1. The vowel \( a \) is inserted immediately before or after the base-final consonant. The vowel always replaces another vowel when it is inserted after the base-final consonant. If there is already an \( a \) in this position it does not change.

2. In certain types of nouns, pattern (1) is combined with further changes in the base. In addition to this, \( u \) is inserted after the first base consonant or there is labialisation of the first or second base consonant. If the first base vowel is \( a \), it is replaced by \( u \).

**Pattern 1:**

<table>
<thead>
<tr>
<th>Final ( a = a )</th>
<th>Final ( i &gt; a )</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>M:SG:EL</strong></td>
<td><strong>M:PL:EL</strong></td>
</tr>
<tr>
<td>( a-cebbiz )</td>
<td>( i-cebbaz )</td>
</tr>
<tr>
<td>( a-serwiṭ )</td>
<td>( i-serwiṭ-en )</td>
</tr>
<tr>
<td>( a-ḡiṭ )</td>
<td>( i-ḡtaṭ )</td>
</tr>
<tr>
<td>( a-ḡelzim )</td>
<td>( i-ḡelzam )</td>
</tr>
</tbody>
</table>

**M:SG:EL**       | **M:PL:EL**       |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>( a-seḵni )</td>
<td>( i-seḵna )</td>
</tr>
</tbody>
</table>

**Pre-final \( u > a \)**

<table>
<thead>
<tr>
<th><strong>M:SG:EL</strong></th>
<th><strong>M:PL:EL</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>( a-qemmum )</td>
<td>( i-qemmam )</td>
</tr>
<tr>
<td>( a-ferkuṭ )</td>
<td>( i-ferkaṭ )</td>
</tr>
<tr>
<td>( a-enequš )</td>
<td>( i-eneqaš )</td>
</tr>
<tr>
<td>( a-meẓẓuḡ )</td>
<td>( i-meẓẓaḡ )</td>
</tr>
<tr>
<td>( a-myuz )</td>
<td>( i-myaz )</td>
</tr>
<tr>
<td>( a-keppuṭ )</td>
<td>( i-keppaṭ )</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Final ( u &gt; a )</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>M:SG:EL</strong></td>
</tr>
</tbody>
</table>

---

83
a-qenqbu  
\hspace{1cm} i-qenqba  
\hspace{1cm} ‘beak’

Ø > a

pre-final Ø > a

<table>
<thead>
<tr>
<th>M:SG:EL</th>
<th>M:PL:EL</th>
</tr>
</thead>
<tbody>
<tr>
<td>a-seynes</td>
<td>i-seynas</td>
</tr>
<tr>
<td>‘big needle’</td>
<td></td>
</tr>
</tbody>
</table>

One noun has two forms in free variation:

<table>
<thead>
<tr>
<th>M:SG:EL</th>
<th>M:PL:EL</th>
</tr>
</thead>
<tbody>
<tr>
<td>a-keskës</td>
<td>i-keskës ~ i-keskësa</td>
</tr>
<tr>
<td>‘couscous colander’</td>
<td></td>
</tr>
</tbody>
</table>

One noun does not change, except for the prefix.

| a-euqqad                 | i-euqqad                 |
| ‘knot’                   |

Type 2

a…a > u…a

<table>
<thead>
<tr>
<th>M:SG:EL</th>
<th>M:PL:EL</th>
</tr>
</thead>
<tbody>
<tr>
<td>a-maras</td>
<td>i-muras</td>
</tr>
<tr>
<td>‘valley, stream’</td>
<td></td>
</tr>
<tr>
<td>a-maḡal</td>
<td>i-muḡal</td>
</tr>
<tr>
<td>‘plants for goats’</td>
<td></td>
</tr>
<tr>
<td>a-maḵar</td>
<td>i-muḵar</td>
</tr>
<tr>
<td>‘thieve’</td>
<td></td>
</tr>
</tbody>
</table>

a…u > u…a

<table>
<thead>
<tr>
<th>M:SG:EL</th>
<th>M:PL:EL</th>
</tr>
</thead>
<tbody>
<tr>
<td>a-saṯur</td>
<td>i-suṯar</td>
</tr>
<tr>
<td>‘beam’</td>
<td></td>
</tr>
<tr>
<td>a-safu</td>
<td>i-sufa</td>
</tr>
<tr>
<td>‘torch’</td>
<td></td>
</tr>
<tr>
<td>a-mdakkuļ</td>
<td>i-mdukkal</td>
</tr>
<tr>
<td>‘friend’</td>
<td></td>
</tr>
<tr>
<td>a-malu</td>
<td>i-mula</td>
</tr>
<tr>
<td>‘shady place’</td>
<td></td>
</tr>
</tbody>
</table>

a…Ø > u…a

<table>
<thead>
<tr>
<th>M:SG:EL</th>
<th>M:PL:EL</th>
</tr>
</thead>
<tbody>
<tr>
<td>a-xaḇeš</td>
<td>i-xuḇaš</td>
</tr>
<tr>
<td>‘jug’</td>
<td></td>
</tr>
<tr>
<td>a-ḥayeḵ</td>
<td>i-ḥuyak</td>
</tr>
<tr>
<td>‘woolen cloth’</td>
<td></td>
</tr>
<tr>
<td>a-sammer</td>
<td>i-summar (~ i-sammir-en)</td>
</tr>
<tr>
<td>‘sunny side of a hill’</td>
<td></td>
</tr>
</tbody>
</table>

F:SG:EL

<table>
<thead>
<tr>
<th>F:PL:EL</th>
</tr>
</thead>
<tbody>
<tr>
<td>ta-xuḏem-t</td>
</tr>
<tr>
<td>‘ring’</td>
</tr>
</tbody>
</table>
Some nouns labialise a consonant in the plural. Because of the position and the accompanying consonant we can establish labialisation with certainty for the following nouns (cf. II.4. phonology):

Ø…u > cʷ…a

M:SG:EL  M:PL:EL
a-ɣhul     i-ɣʷhal       ‘sea horn’
a-yyyy    i-ɣʷyal      ‘donkey’
a-qšuš    i-qʷšaš     ‘snail shell’
a-zyul     i-zʷyal     ‘ladle’

Ø…i > cʷ…a

F:SG:EL  F:PL:EL
ta-qbil-t  ti-qʷbal    ‘tribe’

It is impossible to establish whether there is labialisation or insertion of u in the following nouns with x. As the pattern of plural formation of nouns with x is identical to nouns which have h in this position we choose to analyze the vowel as an u.

Ø..u > u...a

M:SG:EL  M:PL:EL
a-xenṭuṭ i-xunṭaṭ    ‘nasal mucus’
a-xennus i-xunnas    ‘piglet’
a-ḥeṛṛuš i-ḥuṛṛaš    ‘chestnut tree’
a-ḥeččun i-ḥuččan    ‘vagina’

1.5. Different masculine and feminine plurals

Masculine and feminine forms of a noun share the same plural formation, except for the following exceptions. The different genders have different plural formations, for example:

M:SG:EL  M:PL:EL
a-yezdiz i-yezdas    ‘rib’
1.6. Irregular plural formations

**Final Ø > a**

<table>
<thead>
<tr>
<th>F:SG:EL</th>
<th>F:PL:EL</th>
</tr>
</thead>
<tbody>
<tr>
<td>ta-ggur-t</td>
<td>ti-ggura (~ti-ğura)</td>
</tr>
<tr>
<td>ta-ḥebb-et</td>
<td>ti-ḥebba</td>
</tr>
</tbody>
</table>

Some nouns have irregular plurals. All irregular forms are presented here. Either the apophonic type is specific to the noun or there is a combination of an irregular change of the base with plural suffixation. There are two nouns with internal change and a plural prefix -en or -an.

<table>
<thead>
<tr>
<th>M:SG:EL</th>
<th>M:PL:EL</th>
</tr>
</thead>
<tbody>
<tr>
<td>a-yda</td>
<td>i-t-an</td>
</tr>
<tr>
<td>a-zeybiw</td>
<td>i-zeybun-en (~i-zeybiw-en)</td>
</tr>
</tbody>
</table>

The following noun has an irregular apophonic plural:

**M:SG:EL**

<table>
<thead>
<tr>
<th>M:PL:EL</th>
</tr>
</thead>
<tbody>
<tr>
<td>a-qellawes</td>
</tr>
</tbody>
</table>
There are a number of feminine nouns which have irregular base forms in combination with the feminine plural suffix -an.

<table>
<thead>
<tr>
<th>F:SG:EL</th>
<th>F:PL:EL</th>
</tr>
</thead>
<tbody>
<tr>
<td>ta-sa</td>
<td>ti-sekt-an</td>
</tr>
</tbody>
</table>

‘cow’

There is one feminine noun with an apophonic plural which deletes a vowel, degeminates II and adds an a in final position.

<table>
<thead>
<tr>
<th>F:SG:EL</th>
<th>F:PL:EL</th>
</tr>
</thead>
<tbody>
<tr>
<td>ta-selluf-t</td>
<td>ti-selfa</td>
</tr>
</tbody>
</table>

‘tick’

A number of feminine nouns have insertion of i in the plural base.

<table>
<thead>
<tr>
<th>F:SG:EL</th>
<th>F:PL:EL</th>
</tr>
</thead>
<tbody>
<tr>
<td>ta-keskas-t</td>
<td>ti-keskis-an</td>
</tr>
<tr>
<td>ta-sammer-t</td>
<td>ti-sammir-an</td>
</tr>
<tr>
<td>ta-siddel-t</td>
<td>ti-siddil-an</td>
</tr>
</tbody>
</table>

‘couscous colander’

‘small sunny hill’

‘small wall’

There are two feminine nouns which have only a masculine plural. It is not possible to form a feminine plural. The first noun does not have a masculine singular counterpart whereas the second noun does have one.

<table>
<thead>
<tr>
<th>F:SG:EL</th>
<th>M:PL:EL</th>
</tr>
</thead>
<tbody>
<tr>
<td>ta-ğiğ-et</td>
<td>i-ğiğ-en</td>
</tr>
<tr>
<td>ta-yyyyl-t</td>
<td>i-yyyyal</td>
</tr>
</tbody>
</table>

‘tree’

‘donkey’

1.7. Compounds

Two nouns in our corpus are compounds. The singular of the first compound does not have a prefix as the first noun is the kinship noun yemma ‘(my) mother’. The first compound is a combination of yemma ‘mother’ +  aḵal ‘earth’, the second compound is a combination of ayižd ‘billy goat’ and amyan ‘small billy goat’.

<table>
<thead>
<tr>
<th>M:SG:EL</th>
<th>M:PL:EL</th>
</tr>
</thead>
<tbody>
<tr>
<td>yemmawaḵal</td>
<td>i-mmawaḵal-en</td>
</tr>
<tr>
<td>a-şiždamyan</td>
<td>i-şiždenimyan-en</td>
</tr>
</tbody>
</table>

‘type of worm’

‘penisless billy goat’
2. The Arabic-morphology noun

Ghomara Berber has borrowed an great number of Arabic nouns which preserve their original morphology (53% out of a total of about 1700 nouns in our corpus). The basic structure of the Arabic noun consists of an article \( l \)-, a base and for most feminine nouns, a suffix \(-a\). The article can be absent in a number of contexts (cf. IV.1.1.1. syntax). However, as the number of contexts is restricted, we will present the Arabic noun together with the article in this chapter. Like the nouns with Berber morphology, two genders are distinguished, masculine and feminine. Gender is morphologically marked in the great majority of cases, although there exist a number of exceptions. Some nouns are derived by means of an Arabic adjectival (so called \( nisba \)) ending \(-i\) or an \( m\)-prefix. After some remarks on definiteness, gender and derivative noun formation, we will look at plural formation. The discussion of plural formation will comprise the largest part of this chapter. Arabic nouns have two types of plural formation, internal and external plurals, which can be further divided into several types. They distinguish a singular, a dual and a plural number. Dual is a minor category which is only expressed on a few nouns.

2.1. Definiteness

The article \( l \)- is usually present in borrowed nouns (for assimilations, see II.3.6.). However, different from other Berber languages which borrow Arabic nouns, in Ghomara Berber the article in Arabic borrowings can be omitted. Examples (1) and (2) show examples of the use of the article whereas examples (3) and (4) show examples of nouns without the article.

(1) \( ule\text{-}m-s i\text{-}\ddot{g}g = at \quad l-ku\text{ša} \)
   sister-3S 3MS-do:P = 3FS:DO in ART-fire.place
   ‘He put his sister in the fireplace.’

(2) \( i\text{-}k\text{šem} \quad fx\text{-}essen \quad l\text{-}we\text{ḥš} \)
   3MS-enter:P on-3PL ART-animal
   ‘Animals came in on them.’

(3) \( yr\text{-}i \quad ku\text{ř-a} \quad mu\text{qr}\text{-}et \)
   at-1S  ball-F  big-FS
   ‘I have a big ball.’

(4) \( te\text{-}qql\text{-}et \quad we\text{ḥš} \)
   2S-become:P-2S animal
   ‘You have become an animal.’
2.2. Gender

Gender is only a relevant opposition in the singular. Neither in morphology, nor in agreement patterns is there a gender distinction in the plural. This is different from the nouns with Berber morphology, which have a morphological difference between plurals of masculine and feminine nouns. In general, feminine nouns end in -a while masculine nouns do not have any ending. Gender derivation is restricted to sex opposition in the category of nouns referring to professions and qualities of people (cf. Caubet, 1993:61). Some examples are:

**F:SG**
- l-yeḥr-a ‘dust’
- le-ksib-a ‘livestock’
- š-šemṭ-a ‘leather belt’
- l-kur-a ‘ball’
- l-kelm-a ‘word’

**M:SG**
- l-kaf ‘cave’
- d-dker ‘male’
- l-menqeṛ ‘chisel, sting’
- l-mus ‘retractable knife’
- l-ḡim ‘pocket’

There exist a couple of feminine nouns that do not take the feminine suffix -a but have feminine agreement, for example:

**F:SG**
- l-baṭil ‘boat’
- l-lḥem ‘meat’
- l-kif ‘cannabis’
- t-ṭunuḥbir ‘car’

There are five feminine nouns which have a suffix -eṭ instead of -a. In many Berber languages this suffix is much more frequent in borrowed nouns (cf. Kossmann, 2013: 210).

---

34 In the section on the external plural we will see that the suffix -a can be polysemous (III.2.3.4.). It can indicate feminine singular and plural.

35 There is one noun in our corpus which ends in a and has masculine agreement le-xwa ‘valley’. In this case, the ending goes back to an old long ā and not to the feminine suffix -a (Wehr, 1979: 307).
One of these nouns, nneqqabət ‘woodpecker’ is only used by old people. Young people use nneqqaba.

F:SG
l-lefɛpeṯ ‘snake’
l-xarb-ɛt ‘ruin’
n-neqqab-ɛt (≈ n-neqqaba) ‘woodpecker’
l-yaʁs-ɛt ‘vegetable garden’
r-rumay-ɛt ‘sling’

2.3. Number

Most nouns have both a singular and a plural form. A very restricted amount of nouns retain a dual form. There are also nouns which have no number opposition. The dual, singulairia and pluralia tantum are presented first. Singularia and pluralia tantum have either singular or plural morphology and agreement, but lack the opposite number.

The major part of this chapter deals with nouns that have a singular - plural opposition (cf. III.4.1. for collective - unity opposition). There is a basic distinction between two major plural types; the external plural which is formed by means of suffixes and the internal plural (or broken/apophonic plural) which entails a change of the vowel scheme of a base. The external plural can be formed by the suffixes -a, -in, -at, -awat and -s or -is for Spanish loanwords. The suffixes -a and -in are mostly used for the same type of noun. There is a group of Spanish-type borrowings which are partly integrated in the Arabic morphological system. These nouns all allow for the Arabic article, but the plural is formed by suffixing -s or -is, according to Spanish morphology. Some of these nouns combine Arabic-type internal plural formation with Spanish suffixation. A few kinship nouns have a suffix -awat.

The internal plural is formed by molding the singular noun type, of which there are many, into one of a restricted number of fixed plural patterns consisting of three or four consonants and an optional vowel (which can be a schwa). Furthermore, there is a suffix type plural which combines -an with infixation of a vowel. There are a number of exceptional types which have very few attestations each. The few nouns that combine internal and external plural formation are treated in this section as well. A number of plurals are borrowed from Standard Arabic even though the singular is not necessarily a Standard

36 Its origins are unknown. It is tempting to connect it to the Arabic marker -t of a head noun in a genitive construction of the type mra-t muḥammad ‘Mohammed’s wife’. However, in Arabic the head noun never takes the article l-, while in Ghomara Berber these nouns can take the article. Moreover, although this type of genitive construction is quite common in Morocco, it is not common in the Jbala (cf. Moscoso, 2003: 156 - 158). In the Arabic dialects of the North, the periphrastic genitive type noun + dyal + (pro)noun is dominant. Thus, the aforementioned phrase would rather be: lemra dyal muḥammad ‘Mohammed’s wife’.
Arabic noun. Borrowed nouns from European languages (Spanish and French), except for the Spanish borrowings mentioned before, follow the Arabic patterns. If a noun has multiple plurals the variant is given between brackets. Gender is not distinguished in the plural.

2.3.1. The dual

The expression of the dual is limited to a small set of nouns. All these nouns refer to time and number concepts (cf. III.12. on numerals). The dual suffix is -ayen. Note that nhaṛ has a suppletive dual (cf. also III.12.1.5. on numerals). These duals can all take an article, meaning that they can be used adverbially as well as nominally.

<table>
<thead>
<tr>
<th>SG</th>
<th>Dual</th>
</tr>
</thead>
<tbody>
<tr>
<td>l-cam</td>
<td>l-cam-ayen</td>
</tr>
<tr>
<td>š-šehṛ</td>
<td>š-šehṛ-ayen</td>
</tr>
<tr>
<td>n-nhaṛ</td>
<td>l-yum-ayen</td>
</tr>
<tr>
<td>le-qšem</td>
<td>le-qšem-ayen</td>
</tr>
<tr>
<td>t-tuluj</td>
<td>t-tuluj-ayen</td>
</tr>
<tr>
<td>le-myā</td>
<td>le-myat-ayen</td>
</tr>
<tr>
<td>l-alef</td>
<td>l-alf-ayen</td>
</tr>
</tbody>
</table>

2.3.2. Singularia tantum

A number of nouns do not have number opposition. They show singular morphology and agreement. Some examples are:

| l-berzax | ‘honeycomb’ |
| l-weḥš    | ‘animals’   |
| l-ḡaw     | ‘weather’   |
| l-hṣad    | ‘harvest’   |
| r-rawż    | ‘rice’      |
| l-yerṣ    | ‘plant’     |
| l-hašar  | ‘people’    |
| le-ḡaz   | ‘food’      |
| ṛ-ṛṣaṣ   | ‘bullets’   |
| t-thin    | ‘flour’     |
| z-zit     | ‘oil’       |
| š-šmal    | ‘north’     |
2.3.3. Pluralia tantum

Other nouns have the morphology and agreement of plural nouns. These pluralia tantum do not have singular counterparts, for example:

- le-mnader ‘spectacles’
- n-ndader ‘glasses’
- d-drafe ‘clothes’
- le-krafez ‘celery’
- l-leaseb ‘slobber’
- l-hayawan ‘animals’
- l-ghdam ‘lepra’
- le-mtac ‘property’

2.3.4. The external plural

The external plural is formed exclusively by means of suffixes (24% of the Arabic-morphology plurals in our corpus). The suffixes are as follows:

- -in / -a
- -at
- -s ~ -is
- -wat

The suffixes -in and -a are mainly used with nouns of the cCac type. The suffix -a also functions as a feminine singular marker, meaning that plurals of this type are often homophonous with the feminine singular. The suffix -at is the plural suffix of many feminine and masculine nouns of different types. The suffixes -s ~ -is are borrowed together with the Spanish noun. By no means all Spanish nouns are borrowed with (part of) their original morphology. The plural marker -wat is suffixed to a limited set of kinship nouns.

- -in37 ~ -a

Nouns which have base structure cCac refer mostly to professions or qualities of people. The following nouns take the plural marker -in.

<table>
<thead>
<tr>
<th>M:SG</th>
<th>F:SG</th>
<th>PL</th>
<th>PL</th>
</tr>
</thead>
<tbody>
<tr>
<td>s-sehhar</td>
<td>s-sehhar-a</td>
<td>s-sehhar-in</td>
<td>‘wizard’</td>
</tr>
<tr>
<td>l-xewwaf</td>
<td>l-xewwaf-a</td>
<td>l-xewwaf-in</td>
<td>‘coward’</td>
</tr>
</tbody>
</table>

37 The suffix -in is used as well with a number of other nominal categories, such as the adjectives, participles and diminutives.
A small number of nouns that have an m- prefix also take the masculine external plural -in.

<table>
<thead>
<tr>
<th>M:SG</th>
<th>F:SG</th>
<th>PL</th>
</tr>
</thead>
<tbody>
<tr>
<td>l-mežmue</td>
<td>l-mežmue-a</td>
<td>l-mežmue-in</td>
</tr>
<tr>
<td>l-mearıd</td>
<td>l-mearıd-a</td>
<td>l-mearıd-in</td>
</tr>
<tr>
<td>l-melllem</td>
<td>l-melllem-a</td>
<td>l-melllem-in</td>
</tr>
<tr>
<td>l-meyyet</td>
<td>l-meyyet-a</td>
<td>l-meyyet-in</td>
</tr>
<tr>
<td>l-mecallim</td>
<td>l-mecallim-a</td>
<td>l-mecallim-in</td>
</tr>
</tbody>
</table>

The suffix -in also occurs with some nouns with a different structure. The first noun does not have a feminine form. A glide yy is inserted between noun bases that end in i and the plural suffix -in.

<table>
<thead>
<tr>
<th>M:SG</th>
<th>F:SG</th>
<th>PL</th>
</tr>
</thead>
<tbody>
<tr>
<td>š-šfer</td>
<td>-</td>
<td>ššefr-in (~ lešfar)</td>
</tr>
<tr>
<td>l-ummi</td>
<td>l-ummiyy-a</td>
<td>l-ummiyy-in</td>
</tr>
<tr>
<td>l-walid</td>
<td>l-walid-a</td>
<td>l-walid-in</td>
</tr>
<tr>
<td>l-purżwași</td>
<td>l-purżwașiyy-a</td>
<td>l-purżwașiyy-in</td>
</tr>
<tr>
<td>l-puṛri</td>
<td>l-puṛriyy-a</td>
<td>l-puṛriyy-in</td>
</tr>
<tr>
<td>š-štayrı</td>
<td>š-štayrıyy-a</td>
<td>š-štayrıyy-in</td>
</tr>
</tbody>
</table>

The following two nouns form an exception in that the i in the first noun becomes a glide y while in the second noun the suffix replaces the base ending. Both nouns are borrowings from Standard Arabic.

<table>
<thead>
<tr>
<th>M:SG</th>
<th>F:SG</th>
<th>PL</th>
</tr>
</thead>
<tbody>
<tr>
<td>l-muddaci</td>
<td>l-muddacy-a</td>
<td>l-mudacy-in</td>
</tr>
<tr>
<td>z-zani</td>
<td>z-zaniyy-a</td>
<td>z-zan-in</td>
</tr>
</tbody>
</table>

Most nouns of the structure cCac take the plural suffix -a, for example:

<table>
<thead>
<tr>
<th>M:SG</th>
<th>F:SG</th>
<th>PL</th>
</tr>
</thead>
<tbody>
<tr>
<td>l-fellah</td>
<td>l-fellah-a</td>
<td>l-fellah-a</td>
</tr>
<tr>
<td>š-šeffar</td>
<td>š-šeffar-a</td>
<td>š-šeffar-a</td>
</tr>
<tr>
<td>š-šekkam</td>
<td>š-šekkam-a</td>
<td>š-šekkam-a</td>
</tr>
</tbody>
</table>

"liar"
"betrayer"
"crowd"
"invitee"
"master"
"deceased"
"teacher"
"eyelid"
"ignorant"
"parent"
"rich person" (<Fr.)
"poor person" (<Sp.)
"stingy person"
"plaintiff"
"adultery committer"
"farmer"
"thief"
"traitor"
An example of plural agreement is:

(5) šw a degg-an l-fellah-a?
    What REL do:IMP-3PL ART-farmer-PL
    ‘What do farmers do?’

There is one noun in our corpus which allows both plural suffixes -in or -a in the plural.

M:SG        F:SG        PL
l-yeššaš     l-yeššaš-a  l-yeššaš-in ~ l-yeššaš-a‘traitor’

The following two nouns have a different structure, caccac and cccac:

M:SG        F:SG        PL
d-dawsas     d-dawsas-a  d-dawsas-a        ‘squeaker’
l-bergag     l-bergag-a  l-bergag-a        ‘traitor’

2.3.4.1. The plural suffix -aṭ

67% of the external plurals in our corpus take the plural marker -aṭ. The plural suffix replaces the feminine suffix -a. Among these nouns there is a considerable number of loanwords from Spanish and French. If the noun base ends in i a glide yy is inserted between the noun the plural suffix (except for a couple of kinship nouns, see III.5.). If it ends in u the glide ww is inserted. Some examples are:

SG         PL
r-rwidi-a  r-rwidi-aṭ        ‘tire, wheel’  (< Sp.)
n-nsib-a   n-nsib-aṭ         ‘mother-in-law of a man’
s-sbiy-a   s-sbiy-aṭ         ‘paint’
l-batri    l-batriyy-aṭ       ‘battery’  (< Fr.)
l-prikanti l-prikantiyy-aṭ   ‘nurse’  (< Sp.)
š-šeere-a  š-šeere-aṭ        ‘fishing line’
l-kamyuna  l-kamyun-aṭ (~l-kamyun-is) ‘big truck’  (< Sp.)
l-kridi    l-kridiyy-aṭ       ‘debt’  (< Fr.)
l-burq-a   l-burq-aṭ         ‘fortress’
l-lard-a   l-lard-aṭ          ‘school of fish at night’  (< Sp.)
s-sint-a   s-sint-aṭ         ‘cassette’  (< Sp.)
There are two feminine nouns with a prefix m- that take the external plural -at.

l-mdabz-a   l-mdabz-at   'fight'
l-mdafn-a   l-mdafn-at   'fight'

Some examples of masculine nouns that take this plural suffix are:

M:SG    PL
l-ṭam    l-ṭam-at   'veil'
s-sḏae   s-sḏae-at   'sound, noise'
s-sḇab   s-sḇab-at   'amulet'
t-tran   t-tran-at   'train'  (< Fr.)
s-sbiṭar   s-sbiṭar-at   'hospital'  (< Sp.)
l-eilwan   l-eilwan-at   'address'
l-intixaḥ   l-intixaḥ-at   'election'
l-meškliṭ   l-meškliṭ-at   'bicycle'  (< Fr.)

A glide ww ~ w is inserted between the final u of a noun and the plural suffix, e.g. (cf. Marçais, 1977: 121 – 122):

M:SG    PL
l-ḏaḏu   l-ḏaḏuww-at   (~ l-øyu-an)   'enemy'
l-meṛrāxu   l-meṛrāxuww-at   'shark'  (< Sp.)
l-ganču    l-gančuww-at   (~ l-ganču-s)   'kind of rake'  (< Sp.)
s-stilu    s-stiluww-at   (~ s-stilu-s)   'pen'  (< Fr.)

The following noun which has irregular addition of final u in the plural inserts w between the base and the suffix.

SG    PL
l-isem   l-ismuwaṭ   'name'

There is one exception of a noun that ends in an u and has a -t plural suffix.

SG    PL
t-trayenbu   t-trayenbu-t   'spintop'  (< Sp.)
There are a number of borrowed Spanish and French nouns which take over the Spanish plural suffix -s after a base final vowel and -is after a base final consonant. They are included in the category of Arabic morphology nouns as the noun can be combined with the Arabic article l-. The following list provides examples of nouns that take this plural.

### Examples

<table>
<thead>
<tr>
<th>M:SG</th>
<th>PL</th>
<th>English Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>l-kuntru</td>
<td>l-kuntru-s</td>
<td>‘crossroads’</td>
</tr>
<tr>
<td>l-byixu</td>
<td>l-byixu-s</td>
<td>‘old man’</td>
</tr>
<tr>
<td>r-rubyu</td>
<td>r-rubyu-s</td>
<td>‘blond’</td>
</tr>
<tr>
<td>s-suḫri</td>
<td>s-suḫri-s</td>
<td>‘envelope’</td>
</tr>
<tr>
<td>l-fundu</td>
<td>l-fundu-s</td>
<td>‘bottom’</td>
</tr>
<tr>
<td>l-kurču</td>
<td>l-kurču-s</td>
<td>‘mattress’</td>
</tr>
<tr>
<td>l-pirmi</td>
<td>l-pirmi-s</td>
<td>‘driver’s licence’</td>
</tr>
<tr>
<td>l-grifu</td>
<td>l-grifu-s</td>
<td>‘tap’</td>
</tr>
<tr>
<td>l-kwaḏru</td>
<td>l-kwaḏru-s</td>
<td>‘doorframe’</td>
</tr>
<tr>
<td>d-difidi</td>
<td>d-difidi-s</td>
<td>‘DVD’</td>
</tr>
<tr>
<td>l-laḫaḫu</td>
<td>l-laḫaḫu-s</td>
<td>‘sink’</td>
</tr>
<tr>
<td>n-nigru</td>
<td>n-nigru-s</td>
<td>‘brown dolphin’</td>
</tr>
<tr>
<td>t-turnāyyu</td>
<td>t-turnāyyu-s</td>
<td>‘screw’</td>
</tr>
<tr>
<td>l-ḡurni</td>
<td>l-ḡurni-s</td>
<td>‘wage for one day’</td>
</tr>
<tr>
<td>r-rigalu</td>
<td>r-rigalu-s</td>
<td>‘present’</td>
</tr>
<tr>
<td>ʂ-ṣalaḥa</td>
<td>ʂ-ṣalaḥa-s (≈ṣalaḥa)</td>
<td>‘fyke’</td>
</tr>
</tbody>
</table>

Following Spanish plural morphology, nouns that end in a consonant have the plural marker -is.

### Additional Examples

<table>
<thead>
<tr>
<th>M:SG</th>
<th>PL</th>
<th>English Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>l-luring</td>
<td>l-luring-is</td>
<td>‘beacon’</td>
</tr>
<tr>
<td>l-muṛtal</td>
<td>l-muṛtal-is</td>
<td>‘flip (in the water)’</td>
</tr>
<tr>
<td>s-stenyaduṛ</td>
<td>s-stenyaduṛ-is</td>
<td>‘screwdriver’</td>
</tr>
<tr>
<td>r-radyun</td>
<td>r-radyun-is</td>
<td>‘radio’</td>
</tr>
</tbody>
</table>

There is one noun which only occurs in the plural:

### One Noun

<table>
<thead>
<tr>
<th>M:SG</th>
<th>PL</th>
<th>English Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>--</td>
<td>l-want-is</td>
<td>‘gloves’</td>
</tr>
</tbody>
</table>

---

38 According to Moscoso (2003:146) there is a plural suffix -š in the dialect of Chefchaouen which is thought to be a remnant of an earlier stage of Romance influence, for example ewin-es ‘small children’.
Note that most loanwords from Spanish and French follow other Arabic plural formations. Both internal and external plural formation are found in such loanwords, for example:

The external plural

<table>
<thead>
<tr>
<th>M:SG</th>
<th>PL</th>
</tr>
</thead>
<tbody>
<tr>
<td>l-ganču</td>
<td>l-gančuw-w-āt</td>
</tr>
<tr>
<td></td>
<td>‘rake’ ( &lt; Sp.)</td>
</tr>
<tr>
<td>l-garaż</td>
<td>l-garaž-āt</td>
</tr>
<tr>
<td></td>
<td>‘garage’ ( &lt; Fr.)</td>
</tr>
</tbody>
</table>

The internal plural

<table>
<thead>
<tr>
<th>F:SG</th>
<th>PL</th>
</tr>
</thead>
<tbody>
<tr>
<td>l-falda</td>
<td>l-flaḍi</td>
</tr>
<tr>
<td></td>
<td>‘skirt’ ( &lt; Sp.)</td>
</tr>
<tr>
<td>l-plaṣa</td>
<td>l-playeṣ</td>
</tr>
<tr>
<td></td>
<td>‘seat’ ( &lt; Fr.)</td>
</tr>
</tbody>
</table>

2.3.5. The internal plural

With about 500 nouns (30% of all plurals, including Berber) in our corpus, the Arabic internal plural is the most frequent plural type. The internal plural can be divided into several major types, exceptional types, and Standard Arabic borrowings. For the major types many verbs for each type are attested while the exceptional types have only a couple of attestations each. In the part on the major types different plural schemes will be presented which correspond to a vast array of singular schemes. The schemes have a number of consonants (including semi-vowels) and one or two vowels (excluding schwa). For some types which have a vowel insertion, vowels have a corresponding semi-vowel in the plural. Geminate consonants, which are always in final position, are split in the plural. Diphthongs ay and aw are treated as single vowels (cf. II.2.2. Phonology). The final plural type are the nouns which take the suffix -an in the plural and have vowel insertion. In a separate paragraph loans from Standard Arabic will be discussed.

ccacc

There is one basic structure ccacc. Two schemes which insert the semi-vowels w or y are presented separately. Some nouns have an m- prefix which is treated in the same way as a base consonant. This is a fairly frequent plural scheme. It is mainly found with nouns which have four (or five) consonants. Geminates behave like two consonants. If the second consonant is a geminate in the singular, it is split by the vowel in the plural. The singular schemes corresponding to this plural scheme are numerous: cCc, cCic ccccic, cccuc, cCuc, cccc, ccac, Ccac, cCicac, cccic-a, cccic-c-a, ccccc-a, cCc-a, cccuc-a, cCuc-a, cCuc-a (c stands for single consonant, C for a geminate consonant). Some examples are:
2.3.5.1. m- derived nouns

A number of plural nouns have an m- prefix. The prefix functions as a fourth consonant and the most common plural pattern is mcacc (cf. Marçais, 1977:123 who groups them together with four-consonantal nouns). The singular schemes corresponding to the plural scheme are abundant: mcce, mccac-a, mccc, mCc, muccac, meccac-a, meccuc, muccie, mcicc-a.

M:SG | PL
---|---
`l-medfee` | `le-mdafee` | ‘canon’
`l-menšer` | `le-mnašer` | ‘saw’
`l-mehraz` | `le-mharez` | ‘mortar’
`l-menqař` | `le-mnaqer` | ‘chisel, sting’
`l-merfex` | `le-mrafex` | ‘shelf’
`l-mexxaš` | `le-mxaxesz` | ‘poking stick’
`l-meqqas` | `le-mqaqes` | ‘scissors’
`l-muqdaʃ` | `le-mqaded` | ‘paddle’

A few nouns with less than four consonants have a similar structure in the plural:

M:SG | PL
---|---
`l-ġenn` | `le-ğnawen` | ‘spirit’
`t-teksi` | `t-tkases` | ‘taxi’

( < Sp. / Fr.)

In one five-consonant noun, the final n is deleted in the plural.
Singular schemes corresponding to this plural scheme are cacc, cicac, cicicu, cucuc, cacic, cacic-a, cacuc, cacuc-a, cCic-a, cacac, cacac-a, cucac, caycuc.

The same plural type is found with m- derived nouns with the singular schemes macac, mucac, macac-a, for example:

The following noun of this type only has a plural:

The singular patterns corresponding to this plural pattern are ccic, ccic-a, cicc-a, ccuc-a, ccac-a, cC-a. For example:
There is one bi-consonantal ca ca noun which inserts a w and a y in the plural.

F:SG  PL

l-ḥaẓ-a  le-ḥwayeẓ  ‘thing’

ccvc / ccvcv schemes

There are several plural schemes that have the structure ccvc. The vowel position can be filled by either a, u or schwa. This type is mainly found with triconsonantal and bi-consonantal singular nouns. Singular schemes with two consonants and a full vowel (cuc(a), cic, cac-a) insert w or y in the second consonant position in the plural.

ccac

The singular schemes corresponding to this plural scheme are ccic, cuc, cuC, cuc-a, cac-a, cic, ccc, ccc-a, cC-a, cucc, cucc-a. Final geminates in the type cuC are degeminated while geminates in the type cC-a are split. Examples of singular nouns corresponding to this plural noun scheme are:

<table>
<thead>
<tr>
<th>SG</th>
<th>PL</th>
<th>‘father-in-law (of a man)’</th>
</tr>
</thead>
<tbody>
<tr>
<td>n-nsiḥ</td>
<td>n-nsaḥ</td>
<td></td>
</tr>
<tr>
<td>s-suq</td>
<td>le-swaq</td>
<td>‘market’</td>
</tr>
<tr>
<td>l-cušš</td>
<td>le-ɛwaš</td>
<td>‘nest’</td>
</tr>
<tr>
<td>l-muss</td>
<td>le-mwas</td>
<td>‘retractable knife’</td>
</tr>
<tr>
<td>l-but-a</td>
<td>le-bwaṭ</td>
<td>‘butagas cylinder’</td>
</tr>
<tr>
<td>l-ḥukk</td>
<td>le-ḥkaḵ</td>
<td>‘ankle, wrist’</td>
</tr>
<tr>
<td>l-ǧim</td>
<td>le-žyam</td>
<td>‘pocket’</td>
</tr>
</tbody>
</table>

cf. Moscoso 2003 (p. 140-141) for a comparison with the neighbouring dialect of Chefchaouen. The singular schemes in Ghomara only partly correspond to those in the Chefchaouen.
<table>
<thead>
<tr>
<th>SG</th>
<th>PL</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>l-qếhb-a</td>
<td>le-qḥaḥ</td>
<td>‘prostitute’</td>
</tr>
<tr>
<td>s-sekk-a</td>
<td>s-skak</td>
<td>‘coin’</td>
</tr>
<tr>
<td>l-ğumb</td>
<td>le-ţnaḥ</td>
<td>‘side’</td>
</tr>
<tr>
<td>l-burk-a</td>
<td>le-brak</td>
<td>‘duck, pond’</td>
</tr>
<tr>
<td>n-naq-a</td>
<td>n-nyaq</td>
<td>‘female camel’</td>
</tr>
</tbody>
</table>

**ccuc**

The singular schemes corresponding to this plural schemes are cC, cc, cac, cic, ccc, ccc-a, eC-a, cicc, ccic-a/-ēt, cacc. This type includes one noun with an m- prefix.

**SG** | **PL** | Description       |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>l-hemm</td>
<td>le-hmum</td>
<td>‘anxiety’</td>
</tr>
<tr>
<td>r-ras</td>
<td>r-ryus</td>
<td>‘cape’</td>
</tr>
<tr>
<td>l-bît</td>
<td>le-byyuṭ</td>
<td>‘room’</td>
</tr>
<tr>
<td>z-ţerb</td>
<td>z-ţryuṭ</td>
<td>‘fence’</td>
</tr>
<tr>
<td>d-dayf</td>
<td>d-dyuṭ</td>
<td>‘guest’</td>
</tr>
<tr>
<td>n-neṯm-a</td>
<td>n-nuṭum</td>
<td>‘star’</td>
</tr>
<tr>
<td>l-čeṯt-a</td>
<td>le-chuṭṭ</td>
<td>‘bite’</td>
</tr>
<tr>
<td>l-gayz-a</td>
<td>le-gyuṭ</td>
<td>‘stick, wood, pole’</td>
</tr>
<tr>
<td>l-qird</td>
<td>le-qruṭ</td>
<td>‘monkey’</td>
</tr>
<tr>
<td>l-mḏin-a</td>
<td>le-muṭun</td>
<td>‘town’</td>
</tr>
<tr>
<td>l-lef-ēt</td>
<td>l-leuṭ</td>
<td>‘snake’</td>
</tr>
<tr>
<td>š-shaḥd</td>
<td>š-shuṭ (ـ š-suḥuṭ⁴⁰)</td>
<td>‘witness’</td>
</tr>
</tbody>
</table>

**ccc**

The singular schemes corresponding to this plural scheme are cacc-a/-ēt, eC-a, cac-a, ciC-a, cuc-a, for example:

**SG** | **PL** | Description       |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>l-xarḵ-ēt</td>
<td>le-xreb</td>
<td>‘ruin’</td>
</tr>
<tr>
<td>l-yarṣ-ēt</td>
<td>le-yeṣ (~ le-yuṭ)</td>
<td>‘vegetable garden’</td>
</tr>
<tr>
<td>r-yeẓz-a</td>
<td>r-yeẓz</td>
<td>‘turban’</td>
</tr>
<tr>
<td>l-qetuṭ-a</td>
<td>le-qetet</td>
<td>‘bunch of cane’</td>
</tr>
<tr>
<td>š-suḥ-a</td>
<td>š-suḥeb</td>
<td>‘harvest’</td>
</tr>
<tr>
<td>l-miss-a</td>
<td>le-mses</td>
<td>‘table’</td>
</tr>
<tr>
<td>l-fuṭ-a</td>
<td>le-fuṭe</td>
<td>‘towel’</td>
</tr>
</tbody>
</table>

⁴⁰ This is a borrowing from Standard Arabic.
In addition to plurals of the type ccvc, there are also plural schemes that have a structure ccvcv, in which the first vowel is a or u, while the final vowel is a or i:

ccaca

Singular schemes corresponding to this plural scheme are: ccc-a, ccci.

<table>
<thead>
<tr>
<th>SG</th>
<th>PL</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>l-kebd-a</td>
<td>le-kḥada</td>
<td>‘liver’</td>
</tr>
<tr>
<td>l-ĝebli</td>
<td>le-ĝbalá</td>
<td>‘man from the Jbala’</td>
</tr>
<tr>
<td>l-teesri</td>
<td>le-ezara</td>
<td>‘adolescent’</td>
</tr>
</tbody>
</table>

ccai

The singular schemes corresponding to this plural scheme are cic, cac, ccc-a, cacc-a, and nouns that take a base extension -eyy followed by the feminine suffix a. The i in biconsonantal nouns in the singular becomes either a semi-vowel y in the case of l-lil > l-lyali or is replaced by a w in the case of r-riḥ-eyya > r-rwaḥi. In the case of d-ḍaw > d-ḍwawi the vowel w is inserted, as in the case of l-yabeyy-a > le-yaḥba. Except for the first two examples below, all nouns have the feminine singular suffix -a.

<table>
<thead>
<tr>
<th>SG</th>
<th>PL</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>l-lil</td>
<td>l-lyali</td>
<td>‘night’</td>
</tr>
<tr>
<td>d-ḍaw</td>
<td>d-ḍwawi</td>
<td>‘light’</td>
</tr>
<tr>
<td>r-riḥ-eyya</td>
<td>r-rwaḥi</td>
<td>‘traditional women’s shoe’</td>
</tr>
<tr>
<td>t-terb-eyya</td>
<td>t-trabi</td>
<td>‘baby’</td>
</tr>
<tr>
<td>t-ṭeyt-eyya</td>
<td>t-ṭuṭi</td>
<td>‘lid’</td>
</tr>
<tr>
<td>l-yab-eyya</td>
<td>le-yaḥa</td>
<td>‘seagull’</td>
</tr>
<tr>
<td>l-bely-a</td>
<td>le-blayi</td>
<td>‘traditional shoe’</td>
</tr>
<tr>
<td>l-qehw-a</td>
<td>le-qhawi</td>
<td>‘coffee’</td>
</tr>
<tr>
<td>l-fald-a</td>
<td>le-flaḍi</td>
<td>‘skirt’</td>
</tr>
</tbody>
</table>

ccuca

The singular scheme ccc is the most frequently occurring scheme corresponding to this plural. The i of biconsonantal nouns of the type cic becomes a semi-vowel y in the plural, cf. z-zif > z-zyufa ‘handkerchief’. The diphthong ay in s-sayf ‘sword’ is treated in the same way as i. Singular schemes corresponding to this plural scheme are cC, ccc, ccc, ccac, cacc, cic, ccic.
2.3.5.2. The suffix type

There are two types of plural schemes which take the suffix -an. Suffixation is combined with insertion of, or replacement by, i or u after the first base consonant. The suffix can be applied to both bi-consonantal and tri-consonantal singular nouns.

cic-an

The singular schemes corresponding to this plural type are cac, cac-a and cC-a. The feminine singular -a is replaced by -an in the plural. Geminate consonants are degeminated before this suffix. Suffixation is combined with the presence of i after the first consonant.

Some examples are:

M:SG \( \rightarrow \) PL

<table>
<thead>
<tr>
<th>SG</th>
<th>PL</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>š-šear</td>
<td>š-šuer-an</td>
<td>‘hair’</td>
</tr>
<tr>
<td>d-dheb</td>
<td>d-duhb-an</td>
<td>‘gold’</td>
</tr>
<tr>
<td>t-tris</td>
<td>t-turs-an</td>
<td>‘kind of fishnet’</td>
</tr>
</tbody>
</table>

SG \( \rightarrow \) PL

<table>
<thead>
<tr>
<th>SG</th>
<th>PL</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>d-ḍell</td>
<td>d-ḍlula</td>
<td>‘shadow’</td>
</tr>
<tr>
<td>d-dkerja</td>
<td>d-dkura</td>
<td>‘male’</td>
</tr>
<tr>
<td>t-ṭerf</td>
<td>t-ṭrufa</td>
<td>‘end, side, edge, piece’</td>
</tr>
<tr>
<td>le-ktaḥ</td>
<td>le-kṭuḥa</td>
<td>‘book’</td>
</tr>
<tr>
<td>s-sayf</td>
<td>s-syuфа</td>
<td>‘sword’</td>
</tr>
<tr>
<td>z-zif</td>
<td>z-zyuфа</td>
<td>‘handkerchief’</td>
</tr>
<tr>
<td>r-rbic</td>
<td>r-rbuwa</td>
<td>‘grass’</td>
</tr>
</tbody>
</table>

l-kar

<table>
<thead>
<tr>
<th>SG</th>
<th>PL</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>l-kaf</td>
<td>l-kif-an</td>
<td>‘cave’</td>
</tr>
<tr>
<td>l-baz</td>
<td>l-biz-an</td>
<td>‘hawk’</td>
</tr>
<tr>
<td>z-zaż</td>
<td>z-ziž-an</td>
<td>‘glass’</td>
</tr>
<tr>
<td>l-qac</td>
<td>l-qic-an</td>
<td>‘bottom’</td>
</tr>
<tr>
<td>t-ṭaṣ-a</td>
<td>t-ṭiṣ-an</td>
<td>‘cup’ ( (&lt; \text{Sp.}) )</td>
</tr>
<tr>
<td>l-lett-a</td>
<td>l-liṭ-an</td>
<td>‘bottle’</td>
</tr>
</tbody>
</table>

cucc-an

There are different singular noun schemes corresponding to this scheme: cac, ccac, ccc, ccic, cacu. Suffixation is combined with the insertion of vowel u after the first consonant.

M:SG \( \rightarrow \) PL

<table>
<thead>
<tr>
<th>SG</th>
<th>PL</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>š-šear</td>
<td>š-šuer-an</td>
<td>‘hair’</td>
</tr>
<tr>
<td>d-dheb</td>
<td>d-duhb-an</td>
<td>‘gold’</td>
</tr>
<tr>
<td>t-tris</td>
<td>t-turs-an</td>
<td>‘kind of fishnet’</td>
</tr>
</tbody>
</table>
cucy-an
In this type, final u or i is changed to the semivowel y before the suffix, as shown in the following examples:

<table>
<thead>
<tr>
<th>M:SG</th>
<th>PL</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>l-caḏu</td>
<td>l-eudy-an</td>
<td>‘enemies’</td>
</tr>
<tr>
<td>r-razi</td>
<td>r-ruey-an</td>
<td>‘herdsman’</td>
</tr>
<tr>
<td>s-saēi</td>
<td>s-suey-an</td>
<td>‘beggar’</td>
</tr>
</tbody>
</table>

cicc-an
There is one noun of the type cacc which has this plural.

<table>
<thead>
<tr>
<th>M:SG</th>
<th>PL</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>l-ḥažeḇ</td>
<td>l-ḥiž-an</td>
<td>‘eyebrow’</td>
</tr>
</tbody>
</table>

2.3.5.3. Exceptional types
Plural schemes for which maximally three, but mostly just one or two nouns are attested in our corpus are presented here.

cci
M:SG          PL  | Meaning   |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>r-raḥa</td>
<td>le-ṛhi</td>
</tr>
</tbody>
</table>

cuCac
M:SG          PL  | Meaning   |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>t-taḏir</td>
<td>t-tuḡar</td>
</tr>
<tr>
<td>l-kari</td>
<td>l-kurray</td>
</tr>
</tbody>
</table>

cucac
M:SG          PL  | Meaning   |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>r-ṝayeš</td>
<td>r-ṝyaš</td>
</tr>
</tbody>
</table>

cuCa
M:SG          PL  | Meaning   |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>t-tbiḇ</td>
<td>t-ṭubba</td>
</tr>
</tbody>
</table>
cuca
M:SG     PL
ṭpṭaleḇ     ṭpṭulḇa       ‘older pupil’

cuca
M:SG     PL
le-fqi     l-fuqa       ‘imam’

In the two plurals below internal and external plural are combined. The plural suffix -at is added and u is inserted in the base.

M:SG     PL
s-sqef     s-squf-at       ‘roof’
s-sbeḥ     s-sbuḥ-at       ‘morning’

Three Spanish loanwords combine the Spanish suffix -s with Arabic internal plural formation.

M:SG     PL
l-garru     le-graru-s  ~  l-garru-s  ‘cigarette’
l-barku     le-braku-s       ‘big ship’
š-šalṭu     š-slaṭu-s       ‘dive’

cacc

Two nouns with a base extension and an irregular plural are:

l-qneyy-a     l-qnayen       ‘rabbit’
l-pakeyy-a     le-pwaket       ‘pack’
2.3.6. Borrowings from Standard Arabic

Ghomara Berber has a number of plural schemes which are borrowed from Standard Arabic. They do not generally correspond to the plural schemes of dialectal Arabic due to the historical loss of vowels in the latter. These borrowings have mainly entered the language through modern media and education. Below we present a complete list of the nouns in our corpus. The long vowels in Standard Arabic are not distinguished in the dialect.

**caccac**

All these nouns start with a glottal stop in the plural. In dialectal forms the glottal stop does not exist. Singular noun patterns corresponding to this plural are: **cacc, cic, cicc, ccc**. Note that some of the nouns have a singular in dialectal Arabic e.g. **l-merta** and **l-wext**.

<table>
<thead>
<tr>
<th>M:SG</th>
<th>PL</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>l-lawn</td>
<td>l-ʔalwan</td>
<td>‘colour’</td>
</tr>
<tr>
<td>d-din</td>
<td>l-ʔadyan</td>
<td>‘religion’</td>
</tr>
<tr>
<td>l-film</td>
<td>l-ʔ aflam</td>
<td>‘film’</td>
</tr>
<tr>
<td>r-raqem</td>
<td>l-ʔaqam</td>
<td>‘number’</td>
</tr>
<tr>
<td>l-wext</td>
<td>l-ʔ awqat</td>
<td>‘time’</td>
</tr>
<tr>
<td>l-merta</td>
<td>l-ʔamraḍ</td>
<td>‘sickness’</td>
</tr>
</tbody>
</table>

**cucaca**

The singular noun patterns for this type are: **cacic, cacc**.

<table>
<thead>
<tr>
<th>M:SG</th>
<th>PL</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>š-ʃaʕir</td>
<td>š-ʃuʕara</td>
<td>‘poet’</td>
</tr>
<tr>
<td>l-ɛalem</td>
<td>l-ɛulama</td>
<td>‘Islamic scholar’</td>
</tr>
</tbody>
</table>

**cacaca**

The singular patterns are identical to the previous ones: **cacic, cacc**.

<table>
<thead>
<tr>
<th>M:SG</th>
<th>PL</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>l-wazir</td>
<td>l-waṣara</td>
<td>‘minister’</td>
</tr>
<tr>
<td>t-ṭaleb</td>
<td>t-ṭalaḥa</td>
<td>‘pupil in islamic education’</td>
</tr>
</tbody>
</table>

**cacaʔic**

The singular pattern is **cacica**.

---

41 cf. **din** - **dyun** ‘debt’.
The singular noun patterns corresponding to the plural are: cC, cacc, caC.

The noun patterns cicac, eccaca correspond to this plural.

There is only one noun of the type cacac corresponding to this plural pattern.

In the following table all singular schemes are grouped together next to the corresponding plural schemes.
<table>
<thead>
<tr>
<th><strong>m- derived nouns</strong></th>
<th>mccc, mccaca, mcac, mCc, muccaca, mccaca, mCc, mCc</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>cwacey</td>
<td>caec, cicac, caccuc, cicuc, cacuc, cacica, cacuc, cacuca, ceCc, cacac, cacaca, cacuc</td>
<td></td>
</tr>
<tr>
<td><strong>m- derived nouns</strong></td>
<td>macac, mucac, macaca</td>
<td></td>
</tr>
<tr>
<td>ccayec</td>
<td>ccic, ccica, cicca, ccuca, ccaca, ceCc, cc, caca</td>
<td></td>
</tr>
<tr>
<td><strong>CCVC / CCVCV schemes</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ccac</td>
<td>ccic, cuc, cuC, cuca, caca, cic, cecc, cecca, ceCa, cucc, cuca</td>
<td></td>
</tr>
<tr>
<td>ccuc</td>
<td>ceG, eec, cac, cic, cecc, cecca, ceCa, cicc, ccica/et, cacec</td>
<td></td>
</tr>
<tr>
<td>ccecc</td>
<td>cecca, ceCa, caca, ciCa, cuca</td>
<td></td>
</tr>
<tr>
<td>ccaca</td>
<td>cecca, cecci</td>
<td></td>
</tr>
<tr>
<td>ccaci</td>
<td>cic, cac, cecca, caca</td>
<td></td>
</tr>
<tr>
<td>ccuca</td>
<td>ceG, ccc, cec, cac, ccac, cac, cic, ccic</td>
<td></td>
</tr>
<tr>
<td><strong>Suffix type</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>cic-an</td>
<td>cac, caca, ceCa</td>
<td></td>
</tr>
<tr>
<td>cuc-an</td>
<td>caci, ccac, cec, ccc, cacu</td>
<td></td>
</tr>
<tr>
<td>cucy-an</td>
<td>cacu, caci</td>
<td></td>
</tr>
<tr>
<td>cicc-an</td>
<td>cacec</td>
<td></td>
</tr>
<tr>
<td><strong>Exceptional types</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>cci, cuCac, cucac, cuCa, cucca, cucca, cuca, cuCac</td>
<td></td>
<td></td>
</tr>
<tr>
<td>cceccac ~ cuccac</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Borrowings from Standard Arabic</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>?accac</td>
<td>caec, cic, cicc, cecc</td>
<td></td>
</tr>
<tr>
<td>cucaca</td>
<td>cacic, cacec</td>
<td></td>
</tr>
<tr>
<td>cacaca</td>
<td>cacic, cacec</td>
<td></td>
</tr>
<tr>
<td>cacacic</td>
<td>cacica</td>
<td></td>
</tr>
<tr>
<td>cucuc ~ cucac</td>
<td>ceG, eac, caC</td>
<td></td>
</tr>
<tr>
<td>cacacic</td>
<td>ciccac, ceccaca</td>
<td></td>
</tr>
<tr>
<td>caccica</td>
<td>cacac</td>
<td></td>
</tr>
</tbody>
</table>
3. Size derivation

In this chapter size derivation is discussed. Ghomara Berber has two types of size derivation: the diminutive and the augmentative. There are two processes by which diminutives are formed; (1) gender change and (2) application of a vowel scheme to the base. Process (1) only applies to the Berber-morphology class, process (2) applies to both morphological classes. Berber-morphology diminutives can be formed by a combination of both the external diminutive (the application Berber affixation) and the internal diminutive (the insertion of a vowel scheme in the base). The augmentative is formed by applying masculine Berber morphology to a Berber-morphology or Arabic-morphology noun.

Semantically, within the domain of lower animates and inanimates, the diminutive marks a smaller sized object while the augmentative marks a bigger sized object than the basic term. The basic term is a noun (or adjective) from which the smaller or bigger size is derived. It is neutral or unmarked regarding size. For example, the feminine noun ta-ceeddis-t ‘belly’ is neutral regarding size, whereas a-ceededis ‘big belly’ refers explicitly to its bigger counterpart. On the other hand the masculine noun a-sif ‘river’ is neutral regarding size, whereas the feminine ta-sif-t ‘small river’ refers to a smaller sized object. For this reason it is possible to decide which one is the basic term (cf. Kossmann, 2012). In the domain of the diminutive however, there are a number of exceptions, where the meaning is lexicalised and usually not size-related. As it is very productive, most of this chapter will comprise a discussion of the diminutive. In the first part the functioning of the diminutive is presented followed by a discussion of the morphology of the diminutive. The application of the internal schemes follows the Arabic pattern regardless to which base it is applied. The plural of diminutives is discussed in a separate paragraph. There are two small sections on diminutives of adjectives and diminutives of nominalised adjectives. Finally, in a separate paragraph, the augmentative will be presented.

3.1. The diminutive: function

There is a clear division between morphological classes. Many Arabic-morphology nouns that are borrowed can form the internal diminutive, like in Arabic. The internal diminutive involves the application of a fixed set of vowel patterns to a nominal (noun or adjective) base. This mechanism of diminutive formation is taken over in Arabic-morphology nouns in Ghomara Berber, for example:
Berber-morphology nouns can form an external diminutive of lower animate (e.g. insects) and inanimate nouns by means of the feminine affixes t.…t (cf. III.6.4. for other functions of feminine derivation). For a number of nouns it is the only way to form a diminutive:

<table>
<thead>
<tr>
<th>M:SG</th>
<th>M:SG: DIM</th>
</tr>
</thead>
<tbody>
<tr>
<td>le-emel</td>
<td>le-emeyel</td>
</tr>
<tr>
<td>l-meqqas</td>
<td>le-mqiqes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>F:SG</th>
<th>F:SG: DIM</th>
</tr>
</thead>
<tbody>
<tr>
<td>l-uṭa</td>
<td>l-wiṭa</td>
</tr>
</tbody>
</table>

In addition, the patterns of the internal diminutive are borrowed from Arabic. They are extended to many Berber-morphology nouns resulting in the possibility of combining the two diminutives. This does not go the other way around; Arabic-morphology nouns never take the external diminutive. Depending on the Berber-morphology noun the diminutive types can be combined yielding a variety of diminutives. There is a difference between on the one hand higher animates (including humans) and on the other hand lower animates and inanimates. As feminine derivation entails a sex opposition in higher animates, only internal diminutives can be formed. For higher animates the internal diminutive indicates a smaller size. Within this domain there are a few nouns which have only a masculine or a feminine form and a corresponding internal diminutive, for example:

<table>
<thead>
<tr>
<th>M:SG</th>
<th>M:SG: DIM</th>
</tr>
</thead>
<tbody>
<tr>
<td>a-wraw</td>
<td>ta-wraw-t</td>
</tr>
<tr>
<td>a-sif</td>
<td>ta-sif-t</td>
</tr>
<tr>
<td>a-messiw</td>
<td>ta-messiw-t</td>
</tr>
<tr>
<td>a-safu</td>
<td>ta-safu-t</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>M:SG</th>
<th>M:SG: DIM</th>
</tr>
</thead>
<tbody>
<tr>
<td>a-beddik</td>
<td>a-bdidek</td>
</tr>
<tr>
<td>a-giżd</td>
<td>a-gţeyyeţ</td>
</tr>
<tr>
<td>ta-myant</td>
<td>ta-mweyyen-t</td>
</tr>
</tbody>
</table>
Many higher animates can form the diminutive of the masculine and the feminine noun, however, very few nouns referring to human beings can form a diminutive. The diminutive always refers to a smaller size in these cases:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a-frux</td>
<td>a-freyyx</td>
<td>‘boy’</td>
<td>ta-frux-t</td>
</tr>
<tr>
<td>a-rekkal</td>
<td>a-rkikel</td>
<td>‘dog’</td>
<td>ta-rekkal-t</td>
</tr>
<tr>
<td>a-cebbiz</td>
<td>a-cibbez</td>
<td>‘bull’</td>
<td>ta-cebbiz-t</td>
</tr>
<tr>
<td>a-ḥeẓẓut</td>
<td>a-ḥizizet</td>
<td>‘naked one’</td>
<td>ta-ḥeẓẓut</td>
</tr>
<tr>
<td>a-yyul</td>
<td>a-yyweyyel</td>
<td>‘donkey’</td>
<td>ta-yyul-t</td>
</tr>
</tbody>
</table>

There are other higher animate nouns which do not have an internal diminutive. Diminutive formation is not possible in such cases, as feminine gender marks the masculine-feminine sex opposition, for example:

<table>
<thead>
<tr>
<th>M:SG</th>
<th>F:SG</th>
</tr>
</thead>
<tbody>
<tr>
<td>a-ferkuṭ</td>
<td>‘farrow’</td>
</tr>
<tr>
<td>a-meslem</td>
<td>‘muslim’</td>
</tr>
<tr>
<td>a-yaw</td>
<td>‘grandson’</td>
</tr>
<tr>
<td>a-ḥeṛrey</td>
<td>‘ram’</td>
</tr>
</tbody>
</table>

The diminutives of lower animate (such as insects, fish and vermin) and inanimate nouns are more heterogeneous. The diminutive can in principle be formed by both the internal and external diminutive, and the distribution of diminutive patterns seems to be arbitrary. The following examples show that two nouns which fall in the same semantic domain have different types of diminutives, for example:

<table>
<thead>
<tr>
<th>M:SG</th>
<th>M:SG:DIM</th>
</tr>
</thead>
<tbody>
<tr>
<td>a-fus</td>
<td>a-fweyyes</td>
</tr>
<tr>
<td>a-ṭar</td>
<td>ta-ṭtar-t</td>
</tr>
</tbody>
</table>
Some nouns which are inherently masculine or feminine do not allow the external diminutive. They can have an internal diminutive, for example:

**M:SG**  
a-geždir ‘lizard’ (sp.)  
a-keppuṭ ‘coat’  
a-mḡer ‘sickle’  
a-fus ‘hand’  
a-ḡiṭ ‘bird’

**M:SG:DIM**  
a-gže̱der ‘small lizard’ (sp.)  
a-kpi̱pet ‘small coat’  
a-mḡeyye̱r ‘small sickle’  
a-fweyyes ‘small hand’  
a-ḡeye̱yet ‘small bird’

**F:SG**  
ta-fellun-t ‘frying pan’  
ta-wlekk-t ‘gunny sack’  
ta-xaḍem-t ‘ring’  
ta-ḇṣat-t ‘mat’

**F:SG:DIM**  
ta-flileen-t ‘small frying pan’  
ta-wleeyek-t ‘small gunny sack’  
ta-xwیدem-t ‘small ring’  
ta-ḇṣeyyet-t ‘small mat’

More frequent are nouns that have a masculine form and a feminine internal and external diminutive, a three-way distinction. The external diminutive refers to a smaller size while the internal and external diminutive combined refer to an even smaller object. Informants readily accept the second diminutive in many cases. It should be kept in mind that the diminutive except for size difference can stress condescendence, childish talk or involvement on the part of the speaker (Caubet, 1993:132).

**M:SG**  
a-ḡussar ‘hill’  
a-sammer ‘sunny hillside’

**F:SG**  
ta-ḡussar-t  
ta-sammer-t

**F:SG:DIM**  
ta-g̱siser-t  
ta-smimter-t  
‘small hill’  
‘small sunny hillside’

In some cases, the meaning difference has become lexicalised and refers to clearly defineable different types of objects. For instance, the noun a-zref meaning ‘road’ has a diminutive ta-zref-t to refer to ‘footpath’ and ta-zreyye̱f-t to mean ‘small path’ for animals such as rabbits and the like. In this case the reference is clearly different. The same goes for the nouns a-xšeb, ta-xšeb-t and ta-xšeyye̱b-t which refer to traps of different sizes used for different kinds of animals. There are not many nouns which show this lexicalisation.
An interesting case is the noun a-salles ‘darkness’. Here the diminutives refer to a less strong type of darkness.

The combination of external diminutive and internal diminutive can even result in a four-way distinction with a (Berber-morphology) masculine and feminine noun which both have an internal diminutive. The speakers indicated that the internal diminutives are smaller versions. In the case of a-maleḥ ‘fish’ there is a clear gradation from normal size to smaller. On other occasions the differences were not that clear-cut. It was sometimes indicated that there was no difference between the masculine and the feminine internal diminutives. The semantic motivation for these diminutives remains unclear.

In the following cases the nouns have the masculine internal diminutive and either the feminine external or internal diminutive, for example:
3.2. Internal diminutives: morphology

In the following discussion of the different base types we will begin with the singular nouns. Berber and Arabic class nouns show the same pattern and are therefore lumped together. Because degree is only expressed in the base, masculine and feminine nouns are treated together. In the section on the plural formation of diminutives, Arabic and Berber class nouns will be treated separately, as plurality is expressed in the affixes. Finally, some mixed forms and the diminutives of adjectives will be treated.

3.2.1. Quadriliteral bases

All quadriliteral bases insert a vowel \( i \) between the second and third consonant.

\[ \text{ccicc} / \text{ccicca} \]

This scheme has four consonants and the vowel \( i \) between the second and the third consonant. The base vowels are suppressed. This group includes many nouns with the prefix \( m\)-. Singular schemes corresponding to this diminutive type are \text{cuccac}, \text{ccc}, \text{ciccac}, \text{ccic}, \text{cuicac}, \text{ecceuc}, \text{ccc}, \text{cCcac-a}, \text{cccucu}.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a-ftuṭ</td>
<td>a-ftiweṭ</td>
<td>-</td>
<td>ta-ftiweṭ</td>
</tr>
<tr>
<td>a-ḡelzim</td>
<td>a-ḡlizem</td>
<td>ta-ḡelzim-t</td>
<td>-</td>
</tr>
<tr>
<td>a-fraṭ</td>
<td>a-freyyeṭ</td>
<td>ta-farit-t</td>
<td>-</td>
</tr>
<tr>
<td>a-nšel</td>
<td>a-nšeyyel</td>
<td>ta-nšel-t</td>
<td>-</td>
</tr>
<tr>
<td>l-pɛunṣaṛ</td>
<td>le-pɛniṣeṛ</td>
<td>‘water source’</td>
<td></td>
</tr>
<tr>
<td>l-pemšeṛ</td>
<td>le-pemniṣeṛ</td>
<td>‘saw’</td>
<td></td>
</tr>
<tr>
<td>l-pqiṛṭaṣ</td>
<td>le-pqiṛteṣ</td>
<td>‘bullet’</td>
<td></td>
</tr>
<tr>
<td>l-pqezdir</td>
<td>le-pqezider</td>
<td>‘tin can’</td>
<td></td>
</tr>
<tr>
<td>a-ḡelzim</td>
<td>a-ḡlizem</td>
<td>‘pick-axe’</td>
<td></td>
</tr>
<tr>
<td>l-meskin</td>
<td>le-mesiken</td>
<td>‘poor man’</td>
<td></td>
</tr>
<tr>
<td>l-murḥiṭ</td>
<td>le-murḥeṭ</td>
<td>‘homosexual man’</td>
<td></td>
</tr>
<tr>
<td>a-ṣnuḇer</td>
<td>a-ṣnuḇer</td>
<td>‘pine tree’</td>
<td></td>
</tr>
<tr>
<td>a-fernaq</td>
<td>a-ferneq</td>
<td>‘bulging on a stick’</td>
<td></td>
</tr>
<tr>
<td>l-mežmar</td>
<td>le-mežmeṛ</td>
<td>‘stove’</td>
<td></td>
</tr>
</tbody>
</table>
The same diminutive pattern is applied to triliteral common nouns of which the second base consonant is a geminate. This type seems to be infrequent in Arabic, and mainly occurs with certain types of adjectives (cf. Moscoso, 2003: 150-151, Marçais 1977:148, Caubet, 1993:138). In Ghomara Berber the Arabic class diminutives of this type are infrequent as well. However, Berber class nouns with the base structure cvCvc and cCvc are abundant. Other common nouns which have this type of diminutive are ccCvc, cCvc, ccccu, cCcvc, ccc-a. Examples:

- a-cebbiz  a-cebibez  ‘calf’
- a-ṭecciš  a-ṭeccišeš  ‘lamb’
- a-kemmar  a-kmimer  ‘face’
- a-muggaz  a-mgigez  ‘stick to pin animals to’
- a-keppuṭ  a-kpipeṭ  ‘coat’
- a-ṭebban  a-ṭbiben  ‘trousers’
- l-meqqaș  le-mqiqeș  ‘scissors’
- ta-gussar-t  ta-g“siser-t  ‘small hill’
- ta-ḥezzāṭ-t  ta-ḥeziżeṭ-t  ‘naked woman’
- ta-sammeɾ-t  ta-smiimer-t  ‘sunny hill’
- a-ṭreẓẓan  a-ṭriżen  ‘wasp’
- a-qaɾbuɾu  a-qaɾiqueb  ‘beak, point of a knife’
- l-keddaɾ-a  l-kḏidh-a  ‘liar’
- l-bezzun-a  l-bziżn-a  ‘woman’s breast’
- d-demmel-a  d-dmiml-a  ‘hump’

One Berber noun with a diphthong aw between the second and third consonant forms its diminutive as if this diphthong were absent:

- ta-qellawes-t  ta-qlliles-t  ‘small jar’

There are two Arabic-morphology nouns which double a middle single consonant in the diminutive. This is a regular process in the formation of the diminutive of adjectives (cf. paragraph III.9.2.4.).
The following word is exceptional in that it has a reduplication of the first consonant in third position instead of a geminate split.

\[
\begin{align*}
\text{t\-a\-qem\-mum\-t} & \quad \text{t\-a\-qmiq\-em\-t} & \quad \text{‘small mouth’}
\end{align*}
\]

### 3.2.2. Triliteral bases

**ccyye / ccica**

In this type **eyye** is inserted between the second and third base consonant. Two-consonantal nouns of which the final consonant is a geminate are included in this group. When the feminine suffix is added Arabic nouns of this type reduce the vowel sequence **eyye** to **i**, for example in the pair **s\-sbeyyyee** ‘small lion’, **s\-sbic\-a** ‘small lioness’\(^{43}\). Noun patterns corresponding to this diminutive scheme are **ccc**, **ccc**, **ccac**, **ccic**, **ccuc**, **cucc**, **cicc**, **cC**, **ccc\-a**, **cucc\-a**, **cC\-a**, **ccac\-a**, **cacc\-a**.

\[
\begin{align*}
l\-f\text{erg} & \quad \text{le\-f\text{reyy}eg} & \quad \text{‘swarm’} \\
n\-d\text{k\text{er}} & \quad \text{d\-d\text{keyy}ey\text{r}} & \quad \text{‘male’} \\
ta\-k\"s\text{er}\-t & \quad \text{ta\-k\"seyyer\-t} & \quad \text{‘piece of bread’} \\
a\-g\"lal & \quad \text{a\-g\"leyyel} & \quad \text{‘pot’} \\
le\-bzim & \quad \text{le\-b\text{zeyy}em} & \quad \text{‘buckle’} \\
a\-frux & \quad \text{a\-f\text{rey}ey\text{ex}} & \quad \text{‘small chicken’} \\
t\-tuem & \quad \text{t\-t\text{eyy}ey\text{m}} & \quad \text{‘bait’} \\
l\-qird & \quad \text{le\-qreyyed} & \quad \text{‘monkey’} \\
a\-y\text{es\text{s}} & \quad \text{a\-y\text{seyy}es} & \quad \text{‘bone’} \\
n\-nes\text{\text{s}} & \quad \text{n\-n\text{seyy}es} & \quad \text{‘half’} \\
s\-se\text{be\text{c}}\-a & \quad \text{s\-sbic\-a} & \quad \text{‘lioness’} \\
\text{\text{s\-\text{shri}b}\-a} & \quad \text{\text{s\-\text{shri}b}\-a} & \quad \text{‘soup’} \\
l\-\text{e\text{t\text{e}t}}\-a & \quad \text{le\-\text{t\text{et\text{e}}}t\-a} & \quad \text{‘bite’} \\
le\-\text{pl\text{i\text{s}}}\-a & \quad \text{le\-pli\text{s}\-a} & \quad \text{‘seat’}
\end{align*}
\]

\(^{42}\) Nouns which have this singular base structure have different diminutive types, compare **a\-s\text{a}tur** > **a\-\text{swi}t\text{er}** ‘rafter’, **a\-\text{s\text{a}qu}\text{r}** > **a\-\text{\text{swi}q}\text{e}r** ‘axe’, **a\-\text{matu}t** > **a\-\text{\text{m}\text{ti}w}\text{e}t** ‘useless person’.

\(^{43}\) Marçais (1977:146) notes that the **ccyye\text{ec}c\-a** type is ‘facultatif dans les parlers citadins et ruraux d’Algérie et du Maroc, des diminutifs masculins de type **c\_c\text{yyec}c\_c**’, one of his examples occurs in our corpus too, namely **q\text{erda} dim. q\text{rida}**. An important addition of him is ‘Les formes considérées comme facultatives évoluent généralement vers un type où la diphthongue est complètement réduite’ which supports us in our decision to lump these two together.
The base extension eyy is not part of the root to which the diminutive pattern is applied.

Some Arabic-morphology nouns show their gender in the diminutive by adding a feminine suffix -a, for example:

\[
\begin{align*}
\text{l-qahw-} & \quad \text{le-qhiw-} & \text{‘coffee’} \\
\text{l-ḥelw-} & \quad \text{le-ḥliw-} & \text{‘candy’} \\
\end{align*}
\]

\[
\begin{align*}
\text{s-sebn-eyy-} & \quad \text{s-shin-eyy-} & \text{‘headband’} \\
\end{align*}
\]

The next diminutive formation has either the structures ccici or ccicu. The final geminate of two-consonantal bases is split. In the Berber-morphology class, which has three nouns in this structure, the vowel u is found in final position, being added or replacing base-final a or aw.

The schemes cucci, cacci, caccu, cCaci, ccci, cuC, cccac correspond to this diminutive type.

\[
\begin{align*}
\text{l-kursi} & \quad \text{le-kriši} & \text{‘chair’} \\
\text{l-kanki} & \quad \text{le-kniši} & \text{‘gas lamp’} \\
\text{l-ḥarbu} & \quad \text{le-ḥrišu} & \text{‘ship’} \\
\text{l-yarbi} & \quad \text{le-ḥrišu} & \text{‘wind from the west’} \\
\text{l-ferdi} & \quad \text{le-fridi} & \text{‘gun’} \\
\text{a-mušš} & \quad \text{a-mšišu} & \text{‘cat’} \\
\text{a-mexrau} & \quad \text{a-mxšru} & \text{‘rabbit young’} \\
\text{ta-mezla-} & \quad \text{ta-mzišu-} & \text{‘goat that bears in the first year’}
\end{align*}
\]

Numerically this is only a small group. In our corpus there are nineteen nouns which form the diminutive in this way\(^{44}\). A geminate consonant is degeminated before the infix iw.

Singular normal schemes which correspond to this diminutive are cCac, cCac-a, caCc, cacuc, cCuc, ccuc, ccac, ccc-a.

\[^{44}\text{We count masculine and feminine nouns separately. If one counts on the basis of structure alone, the number would be lower, a certain structure can, and often does, have both masculine and feminine affixes.}\]
There is one feminine noun which has a base extension + Feinstein.

ta-ğınıw-t  ta- şiw + Feinstein  ‘pumpkin’

cwic

In this scheme wi is inserted between the first and second base consonant. All twenty one
nouns in this group have a full vowel following the first base consonant. There are two
schemes which form this diminutive: cvcv and cvycv.

l-kaṿiṭ  l- kwīyet  ‘paper’
a-maalāḥ  a- mwileḥ  ‘fish’
l-qaleḇ  le-qwileḥ  ‘mould’
a-saṭuṛ  a- swiṭer  ‘rafter’
l-μuṭuṛ  le-mwiṭeṛ  ‘engine’
l-μuṭac  le-mwiṭee  ‘place’
ta-szęaqur-t  ta- şiqer-t  ‘small axe’
ta-maras-t  ta- mwiśert  ‘valley’
t-饫ayfur  ṭ- tiwfer  ‘table’
a-kaṿydar  a- kwidār  ‘horse’
ta-zaṿyteen-t  ta- zwiten-t  ‘olive’

The following noun does not belong to the Arabic nor the Berber class, as it does not take a
prefix nor the article. The diminutive has Berber morphology.

buriš  a-bwiresh  ‘flying ant’
This pattern applies to two- and three-consonantal noun bases. All nouns which form the diminutive in this way have a w or y as a second consonant. There are two nouns in the following list which have two consonants and a diphthong. Nouns which have this diminutive formation have the following patterns: ciCac, ecuc, cacc, ccac, cacc-a, caccu.

The following noun forms an exception because the addition of wi is combined with reduplication of the first base consonant. This could be due to its adjectival origins.

There are a number of two-consonantal bases which have this diminutive. The base patterns corresponding to this diminutive type are: cac, cic, cuc, cuc-a, caca, CaC-a. The vowel sequence eyye is reduced to i when a feminine suffix -a is added to the base. Most of the nouns in this group have Arabic morphology.

---

45 This noun is a nominalised colour adjective. Colour adjectives all have reduplicated diminutive forms (cf. III.9.4.2.)

46 If the normal market day, which is held on a fixed day in the week, for example coincides with a festivity, it is held on another day in a more compact form. This is referred to as ‘swiqa’.
This one noun is a variant of the above type which has an -eyy base extension.

3.2.3. Exceptions
A small number of diminutives do not fit any of the types discussed above.

<table>
<thead>
<tr>
<th>Base</th>
<th>Diminutive</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>d-daw</td>
<td>d-dwiwi</td>
<td>‘light’</td>
</tr>
<tr>
<td>tu-zzal-t</td>
<td>tu-zizel-t</td>
<td>‘knives’</td>
</tr>
<tr>
<td>l-uṭa</td>
<td>l-wiṭa</td>
<td>‘plain’</td>
</tr>
</tbody>
</table>

3.2.4. Schemes with suffixes

-Š ~ -Ż suffix
Two Berber class nouns combine suffixation of -Š with a pattern insertion based on the type ccyye48. In the second example there is distant voice assimilation and loss of the final base consonant.

<table>
<thead>
<tr>
<th>Base</th>
<th>Diminutive</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>a-qbay</td>
<td>a-qbeyyeš</td>
<td>‘billy goat’</td>
</tr>
<tr>
<td>a-ɣižd</td>
<td>a-ɣżeyyež</td>
<td>‘male kid goat’</td>
</tr>
</tbody>
</table>

3.2.5. Exceptional Berber feminine nouns
In two cases it is not clear which internal diminutive pattern is applied. These feminine Berber-morphology nouns have a -t ~ -et suffix (cf. III.1.3.2.). For some of these nouns it is not immediately obvious what the underlying base structure is upon which the internal diminutive is applied. It seems that the suffix functions as part of the base. For example the noun tarbat ‘girl’ has the diminutive pattern ccyye which indicates that it is seen as a three-consonantal base. This noun has no masculine form. The t is a base consonant.

<table>
<thead>
<tr>
<th>Base</th>
<th>Diminutive</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>ta-rbat</td>
<td>ta-rbeyyet</td>
<td>‘girl’</td>
</tr>
</tbody>
</table>

---

47 The qq is degeminated in the diminutive.
48 Moscoso (2003:151) gives only the example šwiyya > šwiweš or šwiwweš for Chefchaouen Arabic.
In the following noun the feminine suffix consonant is analyzed as a part of the base as well and correspondingly the diminutive scheme cciwc is applied to it. We therefore analyze this noun in the following way.

\[
\text{ta-yaṭ-t} \quad \text{ta-yaṭw-et} \quad \text{‘goat’}
\]

3.2.6. Diminutive of nominalised adjectives

Colour adjectives can be nominalised by applying Berber affixes and suffixing -aw. In the diminutive, the regular pattern of the adjectives is copied, and -aw is absent. Most of these colour nouns have doubling of the second base consonant and the insertion of an i after this consonant. Diminutives can be formed from masculine and feminine nouns (and their corresponding plurals), for example:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a-kehlaw</td>
<td>a-khihel</td>
<td>ta-kehlaw-t</td>
<td>ta-khihel-t</td>
</tr>
<tr>
<td>a-ḥemraw</td>
<td>a-ḥmimer</td>
<td>ta-ḥemraw-t</td>
<td>ta-ḥmimer-t</td>
</tr>
<tr>
<td>a-zergaw</td>
<td>a-zrireq</td>
<td>ta-zergaw-t</td>
<td>ta-zrireq-t</td>
</tr>
<tr>
<td>a-xedraw</td>
<td>a-xdiḍer</td>
<td>ta-xedraw-t</td>
<td>ta-xdiḍer-t</td>
</tr>
<tr>
<td>a-ṣefraw</td>
<td>a-ṣifier</td>
<td>ta-ṣefraw-t</td>
<td>ta-ṣifier-t</td>
</tr>
<tr>
<td>a-zerqaw</td>
<td>a-zrireq</td>
<td>ta-zerqaw-t</td>
<td>ta-zrireq-t</td>
</tr>
<tr>
<td>a-zečrav</td>
<td>a-zečier</td>
<td>ta-zečrav-t</td>
<td>ta-zečier-t</td>
</tr>
</tbody>
</table>

There are two colour nouns, both referring to ‘white’, which do not take the suffix -aw. They show the same diminutive form in the singular as the adjectives.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a-mellul</td>
<td>a-mliwel</td>
<td>ta-mellul-t</td>
<td>ta-mliwel-t</td>
</tr>
<tr>
<td>a-beyyuṭ</td>
<td>a-ḥwibet</td>
<td>ta-beyyuṭ-t</td>
<td>ta-ḥwibet-t</td>
</tr>
</tbody>
</table>
3.3. The diminutive plural

Arabic-morphology and Berber-morphology plurals are formed by means of affixation. Arabic plurals are presented first after which Berber plural formation will be discussed.

3.3.1. Arabic-morphology plurals

Arabic diminutive plurals are formed regularly by the external suffix -at or -in. The suffix -at is used on both masculine and feminine nouns while -in is used on a couple of masculine nouns. Some examples are:

$t$-$bl$ $t$-$bl$-$at$ ‘little plate’
$t$-$w$ $t$-$w$-$at$ ‘little table’
$d$-$y$ $d$-$y$-$at$ ‘little village’
$t$-$w$-$a$ $t$-$w$-$at$ ‘little cup’
$s$-$m$-$a$ $s$-$m$-$at$ ‘little belt’
$le$-$x$-$a$ $le$-$x$-$at$ ‘little ruin’
$le$-$n$-$a$ $le$-$n$-$at$ ‘little bridge’

Nouns ending in a vowel i have a semi-vowel yy before the suffix, e.g:

$le$-$k$-$i$ $l$-$k$-$i$-$at$ ‘little chairs’

The middle vowel sequence eyy is reduced to i when -at is suffixed.

$r$-$b$-$y$ $r$-$b$-$at$ ‘little small grass’
$d$-$d$-$y$-$y$ $d$-$d$-$y$-$at$ ‘little arm’

There are a few masculine nouns in our corpus which take the plural marker -in. Again, the vowel sequence eyy is reduced to i.

$z$-$w$-$y$ $z$-$w$-$in$ ‘little handkerchief’
$t$-$t$-$y$-$y$ $t$-$t$-$in$ ‘little piece’
$s$-$f$-$f$ $s$-$f$-$in$ ‘small thief’

3.3.2. Berber-morphology plurals

The Berber diminutive nouns show the same affixal morphology as non-diminutive regular plurals. They express number, state and gender in the affixes. Masculine nouns have the prefix a- in the singular EL, u- in the singular EA and i- in the plural. The suffix is always -en except for two nouns which take the suffix -an. Feminine nouns have a regular ta-....-t
~ -\textit{t} or \textit{ta-}.....-\textit{et} circumfix in the singular EL, \textit{t}-.....-\textit{t} \sim \textit{-t} in the singular EA, \textit{ti-}.....-\textit{an} circumfix in the plural EL and \textit{t}-.....-\textit{an} in the plural EA. Some feminine nouns have a base extension +\textit{t} before \textit{-an}. Feminine nouns reduce vowel \textit{eyy} to \textit{i} when a plural suffix is added.

3.3.2.1. Masculine plurals

The masculine plural takes the prefix \textit{i-} and the suffix \textit{-en}, for example:

\begin{tabular}{lll}
\textbf{M:SG:EL} & \textbf{M:PL:EL} & \\
\textit{a-yrirf} & \textit{i-yrirf-en} & \textquote{small earthenware plate}' \\
\textit{a-ydiden} & \textit{i-ydidn-en} & \textquote{small fig tree’ (type)} \\
\textit{a-eweyyel} & \textit{i-eweyyl-en} & \textquote{small boy’} \\
\textit{a-xneyeyeq} & \textit{i-xneyyq-en} & \textquote{small corridor’} \\
\textit{a-qzizen} & \textit{i-qzizn-en} & \textquote{small dog puppy’} \\
\end{tabular}

The following two masculine nouns form an exception because they take the \textit{-an} plural suffix.

\begin{tabular}{ll}
\textbf{M:SG:EL} & \textbf{M:PL:EL} \\
\textit{a-ftiweṭ} & \textit{i-ftiwṭ-an} & \textquote{small piece of bread’} \\
\textit{a-mṭiweṭ} & \textit{i-mṭiwt-an} & \textquote{small useless person’} \\
\end{tabular}

Two Arabic-morphology nouns take the Berber plural suffix \textit{-en}.

\begin{tabular}{ll}
\textit{le-mweyyes} & \textit{le-mweyys-en} & \textquote{small retractable knife’} \\
\textit{le-qweyyeṣ} & \textit{le-qweyyys-en} & \textquote{small arch’} \\
\end{tabular}

3.3.2.2. Feminine plurals

The plurals of feminine diminutive nouns have the same affixes as the normal plurals. By far the most frequent type of feminine diminutive plural is the one which has prefix \textit{ti-} and suffix \textit{-an}.

\begin{tabular}{ll}
\textbf{F:SG:EL} & \textbf{F:PL:EL} \\
\textit{ta-fṣiqer-t} & \textit{ti-fṣiqr-an} & \textquote{small bale’} \\
\textit{ta-lfiff-et-t} & \textit{ti-lfiff-an} & \textquote{small blister’} \\
\textit{ta-mnigež-t} & \textit{ti-mnigž-an} & \textquote{small earring’} \\
\end{tabular}
Two diminutive nouns have a prefix \textit{ta-} in the plural. The base has an extension \( + \text{t} \). Both singular and plural prefixes distinguish state.

\begin{tabular}{lllll}
\textit{ta-smimer-t} & \textit{te-smimer-t} & \textit{ta-smimer+\text{t}-an} & \textit{te-smimer+\text{t}-an} & \small{‘small sunny land’} \\
\textit{ta-yweyyel-t} & \textit{te-yweyyel-t} & \textit{ta-yweyyel+\text{t}-an} & \textit{te-yweyyel+\text{t}-an} & \small{‘small filly’}
\end{tabular}

A couple of other nouns also have a base extension \( + \text{t} \) in the plural. These nouns have the regular prefix \textit{ti-}. Many of these nouns reduce vowel \textit{eyy} in the singular to \textit{i} in the plural.

\begin{tabular}{lll}
\textit{F:SG:EL} & \textit{F:PL:EL} & \\
\textit{ta-hbib-et} & \textit{ti-hbib+\text{t}-an} & \small{‘small granule, pimple’} \\
\textit{ta-rbeyy-et} & \textit{ti-rbeyy+\text{t}-an} & \small{‘little girl’} \\
\textit{ta-freyyex-t} & \textit{ti-frix+\text{t}-an} & \small{‘little chicken, girl’} \\
\textit{ta-nqeyyel-t} & \textit{ti-nqif+\text{t}-an} & \small{‘small plant stengel’} \\
\textit{ta-wneyyef-t} & \textit{ti-wnif+\text{t}-an} & \small{‘small bread’} \\
\textit{ta-zreyyef-t} & \textit{ti-zrif+\text{t}-an} & \small{‘small road’}
\end{tabular}

\subsection*{3.4. Mixed Berber and Arabic forms}

Some Arabic class nouns change to the Berber class when in the diminutive. As only the nouns below show this pattern this is to be considered a marginal process.

\begin{tabular}{lll}
\textit{le-fi\text{h}el} & \textit{a-fi\text{h}eyyel} & \small{‘bull’} \\
\textit{r-rt\text{il}-a} & \textit{ta-r\text{t}eyyel-t} & \small{‘spider’} \\
\textit{l-fre\text{r}en} & \textit{a-f\text{r}ire\text{r}en} (\sim \textit{l-fre\text{r}eyy\text{r}en}) & \small{‘traditional oven’} \\
\textit{s-\text{\text{st}}el} & \textit{ta-\text{\text{st}eyyel-t}} & \small{‘bucket’}
\end{tabular}

There is one noun which has a Berber-morphology masculine form and a feminine Arabic-morphology diminutive.
3.5. Augmentative

There are a number of nouns that can form an augmentative. Augmentatives are formed by applying masculine Berber affixes. The nouns are derived either from feminine Berber-morphology nouns or from Arabic-morphology nouns (of which many are feminine). The augmentative only applies to the semantic group of lower animates and inanimates. In the Berber-morphology class the feminine noun has to be the basic term. If the masculine is the basic term, only diminutives can be formed.

There are morphological differences between the two morphological classes. Almost all masculine nouns that are derived from Berber feminine nouns do not show any particular augmentative morphology. They simply have the masculine nominal affixes (cf. III.1. for nominal morphology). In the group that derives the augmentative from Arabic-morphology nouns there are three types; the first type has plain Berber-morphology masculine affixation, the second type combines the Berber affixes with a suffix, while the third type combines Berber affixation with a change of the base pattern.

Many Arabic nouns that form an augmentative are fruits and vegetables. Most nouns referring to fruits and vegetables oppose a collective and a unity noun. The unity noun takes Berber feminine affixes. The augmentative of the unity nouns can be formed by making them masculine. They refer to one big unit. Below we will only present the augmentative masculine form. It is not possible to combine the internal diminutive with an augmentative noun. The plural of the augmentatives is either unattested or formed in a regular way (see III.1. for Berber-morphology plural formation).

3.5.1. Berber-morphology nouns

The following list presents a number of Berber-morphology feminine nouns that have an augmentative. All these forms have a Berber-morphology plural.

<table>
<thead>
<tr>
<th>F:SG:EL</th>
<th>M:SG:EL</th>
</tr>
</thead>
<tbody>
<tr>
<td>ta-fraw-t</td>
<td>a-fraw</td>
</tr>
<tr>
<td>ta-mmar-t</td>
<td>a-mmar</td>
</tr>
<tr>
<td>ta-mšet-t</td>
<td>a-mšet</td>
</tr>
<tr>
<td>ta-eeddis-t</td>
<td>a-eeddis</td>
</tr>
<tr>
<td>ta-rḥeb-t</td>
<td>a-rḥeb</td>
</tr>
<tr>
<td>ta-wfal-t</td>
<td>a-wfal</td>
</tr>
<tr>
<td>t-uzzal-t</td>
<td>a-uzzal</td>
</tr>
<tr>
<td>ta-qebbiṭ-t</td>
<td>a-qebbiṭ</td>
</tr>
<tr>
<td>ta-γ&quot;lal-t</td>
<td>a-γ&quot;lal</td>
</tr>
</tbody>
</table>

‘leaf’            ‘big leaf’
‘beard’           ‘big beard’
‘thigh’           ‘big thigh’
‘belly’           ‘big belly’
‘land’            ‘big land’
‘egg’             ‘big egg’
‘knife’           ‘big knife’
‘bundle’          ‘big bundle’
‘pot’             ‘big pot’
There is one Berber-morphology noun which gets a base extension + iw in the masculine.

F:SG:EL  M:SG:EL

F:SG:EL  M:SG:EL

There is one noun which has a suppletive augmentative counterpart:

F:SG:EL  M:SG:EL

3.5.2. Arabic-morphology nouns

The augmentatives corresponding to Arabic-morphology nouns can be divided in three groups. The first group simply gets masculine Berber affixation just like the Berber-morphology nouns treated above (except for one). Except for a-berquq and a-qseb it is not possible to form a plural of the augmentatives using Berber affixation. Instead, the usual Arabic-morphology plural is used. Some examples are:

M:SG:EL

l-bezzun-a  ‘breast’  a-bezzun  ‘big breast’
le-btata-a  ‘potatoes’  a-btata  ‘big potato’
matish-a  ‘tomatoes’  a-matish  ‘big tomatoe’
t-teffah  ‘apples’  a-teffah  ‘big apples’
d-dellah  ‘watermelons’  a-dellah  ‘big watermelon’
l-bettix  ‘melons’  a-bettix  ‘big melon’
le-bsel  ‘onions’  a-bsel  ‘big onion’
le-qseb  ‘cane’  a-qseb  ‘big cane’
l-bakur  ‘fig’  a-bakur  ‘big fig’
l-berquq  ‘prunes’  a-berquq  ‘big prune’
l-genbul-a  ‘bomb’  a-genbul  ‘big bomb’
l-kerrus-a  ‘wagon’  a-kerrus  ‘big wagon’
le-hraw-a  ‘beating stick’  a-hraw  ‘big beating stick’
Group 2

The augmentatives in this group combine the masculine affixes with one of the suffixes -un, -iw and (in one case) -win.

-un

<table>
<thead>
<tr>
<th>M:SG:EL</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>š-škar-a</td>
<td>‘bag’</td>
</tr>
<tr>
<td>a-šekr-un</td>
<td>‘big bag’</td>
</tr>
<tr>
<td>l-left-eť</td>
<td>‘snake’</td>
</tr>
<tr>
<td>a-lefe-un</td>
<td>‘big snake’</td>
</tr>
<tr>
<td>l-cetb-a</td>
<td>‘threshold’</td>
</tr>
<tr>
<td>a-cetb-un</td>
<td>‘big threshold’</td>
</tr>
<tr>
<td>š-šmeč</td>
<td>‘candles’</td>
</tr>
<tr>
<td>a-šeme-un</td>
<td>‘big candle’</td>
</tr>
<tr>
<td>le-bšel</td>
<td>‘onions’</td>
</tr>
<tr>
<td>a-bšel-un</td>
<td>‘big onion’</td>
</tr>
<tr>
<td>l-left</td>
<td>‘sweet potato’</td>
</tr>
<tr>
<td>a-left-un</td>
<td>‘big sweet potato’</td>
</tr>
<tr>
<td>l-qefl-a</td>
<td>‘button’</td>
</tr>
<tr>
<td>a-qefl-un</td>
<td>‘big button (sea vest)’</td>
</tr>
<tr>
<td>l-qettal-a</td>
<td>‘cobra’</td>
</tr>
<tr>
<td>a-qettal-un</td>
<td>‘big cobra’</td>
</tr>
<tr>
<td>š-šennar’a</td>
<td>‘fish hook’</td>
</tr>
<tr>
<td>a-šennar-un</td>
<td>‘big fish hook’</td>
</tr>
</tbody>
</table>

There is one noun which has two possible forms of which the second is irregular.

<table>
<thead>
<tr>
<th>M:SG:EL</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>l-ḥafer</td>
<td>‘foot print’</td>
</tr>
<tr>
<td>a-ḥefr-un</td>
<td>a-ḥawfar ‘big foot print’</td>
</tr>
</tbody>
</table>

Some augmentatives have a suffix -iw. The few nouns which take this form all end in a.

-iw

<table>
<thead>
<tr>
<th>M:SG:EL</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>r-reml-a</td>
<td>‘thin sand’</td>
</tr>
<tr>
<td>a-reml-iw</td>
<td>‘thick sand’</td>
</tr>
<tr>
<td>l-xanč-a</td>
<td>‘bag’</td>
</tr>
<tr>
<td>a-xanč-iw</td>
<td>‘big bag’</td>
</tr>
<tr>
<td>r-reẓẓ-a</td>
<td>‘turban’</td>
</tr>
<tr>
<td>a-reẓẓ-iw</td>
<td>‘big turban’</td>
</tr>
</tbody>
</table>

-win

There is one noun which takes the suffix -win.

<table>
<thead>
<tr>
<th>M:SG:EL</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>r-ḥař-a</td>
<td>‘mill’</td>
</tr>
<tr>
<td>a-ḥeḥ-win</td>
<td>‘big mill’</td>
</tr>
</tbody>
</table>

---

49 The noun does not take an article.
50 idem.
**Group 3**
The final group form the augmentative by changing the base pattern in the masculine. All nouns have the pattern \( cCvc \) in het augmentative. The vowel is a, i or u.

<table>
<thead>
<tr>
<th>Base Form</th>
<th>Augmentative Form</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>d-ders-a</em></td>
<td><em>a-derrus</em></td>
<td>‘wheat heap’</td>
</tr>
<tr>
<td><em>l-bhār</em></td>
<td><em>a-bēḥhur</em></td>
<td>‘sea’</td>
</tr>
<tr>
<td><em>l-ṣeṭṭ-a</em></td>
<td><em>a-ṣeṭṭuṭ</em></td>
<td>‘bite’</td>
</tr>
<tr>
<td><em>t-tbel</em></td>
<td><em>a-tēbbal</em></td>
<td>‘tambourine’</td>
</tr>
<tr>
<td><em>d-debz-a</em></td>
<td><em>a-debbiz</em></td>
<td>‘slap’</td>
</tr>
<tr>
<td><em>l-gezb-a</em></td>
<td><em>a-gezzilb</em></td>
<td>‘horn’</td>
</tr>
<tr>
<td><em>š-ṣṭeḥ</em></td>
<td><em>a-šēṭṭib</em></td>
<td>‘heap of bush’</td>
</tr>
<tr>
<td><em>l-gayz-a</em></td>
<td><em>a-geyyuz</em></td>
<td>‘beam’</td>
</tr>
<tr>
<td><em>l-hayṭ</em></td>
<td><em>a-ḥeyyuṭ</em></td>
<td>‘wall’</td>
</tr>
<tr>
<td><em>l-yayṭ-a</em></td>
<td><em>a-yeyyuṭ</em></td>
<td>‘flute’</td>
</tr>
<tr>
<td><em>l-ḡeld</em></td>
<td><em>a-želluḏ</em></td>
<td>‘skin’</td>
</tr>
<tr>
<td><em>l-xubz-a</em></td>
<td><em>a-xubbaz</em></td>
<td>‘one bread’</td>
</tr>
</tbody>
</table>
4. Interaction of Arabic and Berber systems

In this section nouns are presented whose inflection is both Arabic and Berber. Nouns which oppose a collective and a unity noun can have Arabic morphology for the collective noun and Berber morphology for the unity noun. Moreover, a fair amount of nouns have Berber-morphology deadjectival nouns which are derived from Arabic-morphology adjectives. Finally, adjectival (nisba-type) nouns, the Berber element bu-, š-šab and mul are discussed.

4.1. Collective and unity nouns

The collective refers to a group of individuals or objects. It has masculine singular agreement (with verbs, adjectives and pronouns). Most collectives are found within the semantic group of fruits and vegetables. The collective nouns in Ghomara Berber are taken over from Arabic in their original forms, i.e. they retain their Arabic inflectional morphology. There are no collective - unity noun oppositions which have only Berber-morphology. Some unity nouns are formed according to Arabic morphology; individuation of a noun is established by adding the feminine suffix -a to the masculine form. Only some of these nouns allow for a plural. Most unity nouns apply the Berber feminine affixes. It is always possible to form a plural of a Berber-morphology unity noun. A number of Berber-morphology feminine nouns have base extensions. The attested base extensions in the singular or plural are: +i, +t, +it, +it, +k, +iw. Especially fruit, vegetables, trees and plants oppose a collective and a unity noun. The nouns mandalina ‘mandarine’, xiča ‘dried fig’ and matiša / tumašiš ‘tomatoe’ do not take an article. However, there are a number of nouns that fall outside of this group. Examples of Arabic-Berber correspondences are:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>l-banan</td>
<td>ta-банан-t</td>
<td>ti-банан-an</td>
</tr>
<tr>
<td>l-bakur</td>
<td>ta-бакур-t</td>
<td>ti-бакур-an</td>
</tr>
<tr>
<td>l-laymum</td>
<td>ta-лаймун-t</td>
<td>ti-лаймун-an</td>
</tr>
<tr>
<td>mandalina-a</td>
<td>ta-мандалин-t</td>
<td>ti-мандалин-an</td>
</tr>
<tr>
<td>l-berquq</td>
<td>ta-беркук-t</td>
<td>ti-беркук-an</td>
</tr>
<tr>
<td>d-dellaḥ</td>
<td>ta-деллаḥ-t</td>
<td>ti-деллаḥ-an</td>
</tr>
<tr>
<td>l-felfel</td>
<td>ta-фельфел-t</td>
<td>ti-фельфел-an</td>
</tr>
<tr>
<td>l-firas</td>
<td>ta-фирас-t</td>
<td>ti-фирас-an</td>
</tr>
<tr>
<td>l-lečin</td>
<td>ta-леčин-t</td>
<td>ti-леčин-an</td>
</tr>
<tr>
<td>l-lingaš</td>
<td>ta-лингаš-t</td>
<td>ti-лингаš-an</td>
</tr>
<tr>
<td>t-teffaḥ</td>
<td>ta-teffaḥ-t</td>
<td>ti-teffaḥ-an</td>
</tr>
<tr>
<td>s-snuḥer</td>
<td>ta-snuḥer-t</td>
<td>ti-snuḥr-an</td>
</tr>
</tbody>
</table>
The following Berber-morphology unity nouns take base extensions.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>l-ğu gettext</td>
<td>ta-žuž-get</td>
<td>ti-žuž + t-an</td>
</tr>
<tr>
<td>n-niš</td>
<td>ta-niš-get</td>
<td>ti-niš + t-an</td>
</tr>
<tr>
<td>l-luwqiẗ t</td>
<td>ta-lewqit-t</td>
<td>ti-lewqit-an</td>
</tr>
<tr>
<td>l-lawz</td>
<td>ta-lawz + i-t</td>
<td>ti-lawz + i-t-an</td>
</tr>
<tr>
<td>š-šmuṛ-ra-a</td>
<td>ta-šmuṛṛ + ek-t</td>
<td>ti-šmuṛṛ + k-an</td>
</tr>
<tr>
<td>s-sfenģ</td>
<td>ta-sfenģ + ek-t</td>
<td>ti-sfenģ + k-an</td>
</tr>
</tbody>
</table>

In addition to a base extension the following noun also has a vowel change i > a in the plural.

xič-a         | ta-xač + iw-t            | ti-xač + iw-an   | 'dried fig' |

For the noun ‘tomato’ there are two equivalents which are in free variation. As the noun tumaṭiš ‘tomato’ has this form we do not consider tu a prefix in the singular unity noun.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>maṭiša~ tumaṭiš</td>
<td>ta-maṭišt~tumaṭišt-t</td>
<td>ti-maṭišt-an</td>
</tr>
</tbody>
</table>

The following collective-unity nouns have Arabic morphology all over. Some unity nouns have an attested plural form. The noun š-šmee ‘candles’ adds an extension + ay in the plural.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>t-ṭuḥ</td>
<td>t-ṭuḥ-a</td>
<td>t-ṭuḥ-at</td>
</tr>
<tr>
<td>l-leḥm</td>
<td>l-leḥm-a</td>
<td>-</td>
</tr>
<tr>
<td>l-ḡawahar</td>
<td>l-ḡawahar-a</td>
<td>-</td>
</tr>
</tbody>
</table>

51 See II.1.3. phonology for ş and ž.
In one case the Berber singular nouns refers to the collective and the Arabic singular noun refers to the unity.

**M:SG**  **F:SG:EL**  

*ta-lqim-t*  

l-xubz-a  

‘bread’

In one case the Arabic singular refers to the collective, but a plural Berber (diminutive) noun to refer to single small children.

**M:SG**  **F:SG:EL**  

*le-hšam*  

i-hššm-en  

‘children’

One noun has a Berber unity noun and an Arabic-morphology plural, for example:

**M:SG**  **F:SG:EL**  **PL**  

*d-dlem*  

*ta-dlem-t*  

*d-dluma*  

‘plant’

In some cases either the Arabic- or Berber-morphology unity noun functions as a diminutive:

**M:SG**  **F:SG:EL**  **F:PL:EL**  **PL**  **Dim:SG**  **Dim:PL**  

*l-qirṭas*  

*ta-qirṭas-t*  

*ti-qirṭas-an*  

*le-qraitš*  

*le-qraitš-an*  

‘bullet’

The following Berber-morphology diminutive has a base extension +ṭ.

**M:SG**  **F:SG:EL**  **F:PL:EL**  **PL**  

*l-luḥ*  

*ta-lwiḥ-et*  

*ti-lwiḥ+ṭ-an*  

*l-lwayeḥ*  

‘shelf’

### 4.2. Berber singular - Arabic plural

Some Berber-morphology singulars have Arabic-morphology plurals. Their feminine counterpart, if existent, has Berber morphology.

**M:SG:EL**  **F:SG:EL**  **PL**  

*a-beebuš*  

*ta-beebuš-t*  

*le-bebeš*  

‘dung beetle’

*a-heğal*  

*ta-heğal-t*  

*le-hğağel*  

‘widow(er)’

*a-karḥaš*  

*ta-karḥaš-t*  

*le-kraheš*  

‘claw’
a-menğur  -  le-mnažer  ‘traditional chair’

a-meɣra bi  ta-meɣra bi- t  le-myaṛa  ‘Moroccan’

a-rif  ta-rif- t  r-rwa fa  ‘Riffian’

a-mehgur  ta-mehgur-t  le-mhyažer  ‘orphan’

a-mesmar  -  le-mṣummar  ‘nail’

a-mqerreḍ  ta-mqerreḍ-t  le-mqerrdīn  ‘weak, small person’

a-mxazni  -  le-mxazniyya  ‘government agent’

a-mcewen  ta-mcewen-t  le-mcewīn  ‘help’

a-mḥaḍri  -  le-mḥaḍra  ‘pupil’

a-qrin  ta-qrin-t  le-qra  ‘peer’

a-xeddam  ta-xeddam-t  l-xeddama  ‘worker’

a-ceyyal  ta-ceyyal-t  le-cewāl  ‘boy / girl / children’

a-kaḍār  -  le-kaḍa  ‘horse’

a-feshqaṛ  ta-feshqaṛ-t  le-fṣaqer  ‘bale’

One noun has an Arabic-morphology feminine and plural. For another noun Arabic- and Berber-morphology variants are in free variation.

<table>
<thead>
<tr>
<th>M:SG:EL</th>
<th>F:SG</th>
<th>PL</th>
</tr>
</thead>
<tbody>
<tr>
<td>a-gren ren</td>
<td>le-grana</td>
<td>le-grayen</td>
</tr>
<tr>
<td>a-šerriṭ</td>
<td>ta-šerriṭ- š-šerriṭ-a</td>
<td>i-šerriṭ-en- š-šrāt</td>
</tr>
</tbody>
</table>

One noun has Berber-morphology singulars and a feminine plural, whereas the general plural is Arabic. The feminine plural has a base extension + ṭ.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>a-zar</td>
<td>ta-zar-t</td>
<td>ti-zar-ṭ-an</td>
<td>l-ḡiṛan</td>
</tr>
</tbody>
</table>

There are two nouns in our corpus for which the Berber- and Arabic-morphology plurals are in free variation.

<table>
<thead>
<tr>
<th>M:SG:EL</th>
<th>PL</th>
</tr>
</thead>
<tbody>
<tr>
<td>a-keppuṭ</td>
<td>i-keppat- le-kepāteṭ</td>
</tr>
<tr>
<td>a-qurtaš</td>
<td>i-qurtaš- le-qrateš</td>
</tr>
</tbody>
</table>

There is one case of an Arabic singular noun which has a Berber-morphology plural.
Finally, the noun for ‘nose’ is an Arabic-morphology plural, whereas the word for ‘nostril’ is a Berber-morphology singular noun:

<table>
<thead>
<tr>
<th>PL</th>
<th>F:SG:EL</th>
<th>F:PL:EL</th>
</tr>
</thead>
<tbody>
<tr>
<td>le-xnafer</td>
<td>‘nose’</td>
<td>ta-xenfur-t</td>
</tr>
</tbody>
</table>

### 4.3. Deadjectival nouns

A limited amount of nouns can be derived from Arabic-morphology adjectives using Berber morphology (cf. III.9.2.4. for diminutives of these forms). These are mostly colour nouns. Most of these nouns are derived by adding Berber nominal inflection and a base extension $+\text{aw}$, for example:

<table>
<thead>
<tr>
<th>Adjective</th>
<th>M:SG</th>
<th>F:SG</th>
</tr>
</thead>
<tbody>
<tr>
<td>khel ‘black’</td>
<td>$a$-keḥl $+\text{aw}$</td>
<td>ta-keḥl $+\text{aw}$-t</td>
</tr>
<tr>
<td>ḥmer ‘red’</td>
<td>$a$-ḥemr $+\text{aw}$</td>
<td>ta-ḥemr $+\text{aw}$-t</td>
</tr>
<tr>
<td>zreq ‘blue’</td>
<td>$a$-zreq $+\text{aw}$</td>
<td>ta-zreq $+\text{aw}$-t</td>
</tr>
<tr>
<td>xḍ̱er ‘green’</td>
<td>$a$-xeḍ ̱r $+\text{aw}$</td>
<td>ta-xeḍ ̱r $+\text{aw}$-t</td>
</tr>
<tr>
<td>sfeṛ ‘yellow’</td>
<td>$a$-ṣefṛ $+\text{aw}$</td>
<td>ta-ṣefṛ $+\text{aw}$-t</td>
</tr>
<tr>
<td>zreg ‘grey’</td>
<td>$a$-zerg $+\text{aw}$</td>
<td>ta-zerg $+\text{aw}$-t</td>
</tr>
<tr>
<td>zeṛ ‘blond’</td>
<td>$a$-zeɛṛ $+\text{aw}$</td>
<td>ta-zeɛṛ $+\text{aw}$-t</td>
</tr>
</tbody>
</table>

There are two color nouns, both referring to ‘white’, which do not take the base extension $+\text{aw}$. One of these nouns is derived from an Arabic-morphology adjective, the other from a Berber-morphology adjective:

<table>
<thead>
<tr>
<th>Adjective</th>
<th>M:SG</th>
<th>F:SG</th>
</tr>
</thead>
<tbody>
<tr>
<td>byeṭ ‘white’</td>
<td>$a$-beyyuṭ</td>
<td>ta-beyyuṭ-t</td>
</tr>
<tr>
<td>mellul ‘white’</td>
<td>$a$-mellul</td>
<td>ta-mellul-t</td>
</tr>
</tbody>
</table>

There are two more examples of de-adjectival nouns in our corpus. One is derived from an Arabic-morphology adjective, the other from a Berber-morphology adjective. The first noun adds an irregular element ḫen.
ṭwil ‘tall’ > a-ḥenṭwil ‘very tall person’
messus ‘insipid’ > ta-messus-t ‘bread without salt’

4.4. Nisba type and tribal affiliation

The suffix -i (masculine), and base extensions plus suffix eyy-a (feminine), eyy-in (plural) has several functions, one of which is to refer to ethnicity or place of origin (cf. Marçais, 1977:113 for other functions).

<table>
<thead>
<tr>
<th>M:SG</th>
<th>F:SG</th>
<th>PL</th>
</tr>
</thead>
<tbody>
<tr>
<td>t-tiṭwan-i</td>
<td>t-tiṭwan-eyy-a</td>
<td>t-tiṭwan-eyy-in</td>
</tr>
<tr>
<td>l-buzraṯ-i</td>
<td>l-buzraṯ-eyy-a</td>
<td>l-buzraṯ-eyy-in</td>
</tr>
<tr>
<td>l-menṣur-i</td>
<td>l-menṣur-eyy-a</td>
<td>l-menṣur-eyy-in</td>
</tr>
</tbody>
</table>

In addition, there is a Berber element ay used for tribal affiliation which can be translated as ‘those of’. It only has a plural meaning. It is connected to the noun by the genitive prepostion n. Note that it is only used for the names of neighbouring tribes. Tribes which are located further away are referred to by the Arabic element mni, e.g. mni xaled ‘Bani Khaled’.

ay n buẓra ‘those of Bouzra’
ay n menṣur ‘those of Mensour’
ay n zyaṯ ‘those of Ziat’

In the following case the adjectival nisba suffixes are used to single out a person out of a collective noun, for example:

<table>
<thead>
<tr>
<th>M:SG</th>
<th>F:SG</th>
</tr>
</thead>
<tbody>
<tr>
<td>l-lihuḏ ‘Jews’</td>
<td>l-lihuḏ-i l-lihuḏ-eyy-a ‘Jew’</td>
</tr>
</tbody>
</table>

The feminine form of the following noun refers both to the feminine and the plural.

<table>
<thead>
<tr>
<th>M:SG</th>
<th>F/PL</th>
</tr>
</thead>
<tbody>
<tr>
<td>l-ġaḍarm-i</td>
<td>‘male gendarme’ l-ġaḍarm-eyy-a ‘female gendarme / gendarmes’</td>
</tr>
</tbody>
</table>

The suffix -eyy-a is used to refer to different age groups of goats depending on the number of teeth they have. In its fourth year the goat has all its teeth.

F:SG

s-ttn-eyy-a ‘one year old goat (with two teeth)’
4.5. Pre-nominal elements bu-, šab, mul

The element bu- can be prefixed to nouns. Its meaning is something like ‘possessor of’. It can also have a pejorative meaning in combination with some characteristic with which the referent is known (e.g. big nose, big feet). When preceding a Berber-morphology noun, the latter is in the EA. The form refers to the masculine, there is no feminine form. For the plural the noun ššab ‘people’ is used, followed by the EL. The prefix bu- can be preserved when ššab precedes. The noun M:SG mul F:SG mul-a PL mwal-in ‘owner’ has a similar function. This noun takes pronominal suffixes (cf. III.11.4.). The nouns šab and mul are followed by nouns in the EL. Some examples are:

**bux**
- bu-t-ɛeddis-t ‘the one with the belly’
- bu-i-fadd-en ‘the one with the knees’
- bu-te-xxun-t ‘the one with the ass’

**šab**
- šab ti-ɛebbut-an ‘the people with the bellies’

**mul**
- mul l-ḥanuṭ ‘the owner (M.) of the shop’
- mul ṭṭunuḇir ‘the owner of the car’
- mul-a l-ḥanuṭ ‘the owner (F.) of the shop’
- mwal-in ti-mmira ‘the people with the beards’
- mwal-in bu-t-ɛebbut-an ‘the people with the bellies’
5. Non-affix nouns

There are a number of nouns which do not take affixes in the singular. They can be
categorised into different groups; kinship nouns that do not have nominal affixes, nouns that
have a Berber-morphology plural, singularia tantum without affixes and finally nouns which
have the Arabic-morphology plural -āt. The kinship nouns display features which are
different from other morphology classes. None of these nouns has Berber inflection nor can
they take the Arabic article 1. The nouns that have a plural either have a suppletive form or
take a suffix -wāt which is not attested in other morphology classes. This plural suffix
cannot be analyzed as a glide between the final base vowel i and the plural marker as all
other nouns have a glide yy. The singular of a number of kinship nouns which are clearly
borrowed from Arabic, always imply a relation to the first person singular, i.e. ‘my aunt’,
‘my uncle’. The final base vowel i is the petrified Arabic 1SG possessive suffix. All kniship
nouns enumerated below have inherent 1SG reference. It is not necessary to use the
possessive pronoun, except for emphatic purposes. To refer to other persons and in the
plural, a possessive preposition is used, e.g. eemṭi nnes ‘his/her paternal aunt’. There are
two kinship nouns that have a suppletive plural ayeṭma ‘brothers and sisters’. These nouns
refer to the first person possessor when used without a suffix. They take pronominal suffixes
in the second and third person singular (not in other persons for which a genitive
construction is used, cf. III.11.4. on pronouns). Other kinship nouns belong to the Berber or
the regular Arabic morphology class. The kinship nouns in this class are:

<table>
<thead>
<tr>
<th>SG</th>
<th>PL</th>
</tr>
</thead>
<tbody>
<tr>
<td>ḫmā</td>
<td>ayeṭmā</td>
</tr>
<tr>
<td>uleṭmā</td>
<td>ayeṭmā</td>
</tr>
<tr>
<td>eemṭi</td>
<td>eemṭi-wāt</td>
</tr>
<tr>
<td>eemmi</td>
<td>eemmi-wāt</td>
</tr>
<tr>
<td>xalti</td>
<td>xalti-wāt</td>
</tr>
<tr>
<td>ḥbībī</td>
<td>ḥbībī-wāt</td>
</tr>
<tr>
<td>źeddī</td>
<td>źeddī-wāt</td>
</tr>
<tr>
<td>eezzi</td>
<td>-</td>
</tr>
<tr>
<td>nanna</td>
<td>-</td>
</tr>
<tr>
<td>ḍaba</td>
<td>-</td>
</tr>
<tr>
<td>yeemma</td>
<td>-</td>
</tr>
</tbody>
</table>

Some non-affix nouns have a Berber-morphology plural, for example:

<table>
<thead>
<tr>
<th>SG</th>
<th>PL</th>
</tr>
</thead>
<tbody>
<tr>
<td>buqeqās (→ a-buqeqās)</td>
<td>i-buqeqās-en ‘unripe fig’</td>
</tr>
<tr>
<td>buriš</td>
<td>i-buriš-en ‘ant with wings’</td>
</tr>
<tr>
<td>žaymuṭ</td>
<td>i-žaymuṭ-en ‘gadfly’</td>
</tr>
</tbody>
</table>
The following two nouns only take a Berber-morphology plural suffix.

\[
\begin{align*}
\text{ṭrayllil} & \quad \text{ṭrayllil-en} & \text{‘bat’} \\
\text{payeyyu} & \quad \text{payeyyu + w-en} & \text{‘parrot’}
\end{align*}
\]

Other nouns do not take the Arabic article l- in the singular, but have an Arabic-morphology plural -aṯ. Some of these nouns are Spanish loanwords. The following two nouns which do not allow for the article take the plural suffix -aṯ.

\[
\begin{align*}
\text{budrihem} & \quad \text{budrihm-aṯ} & \text{‘type of bird’} \\
\text{muka} & \quad \text{muk-aṯ} & \text{‘owl’}
\end{align*}
\]

There are some singularia tantum which cannot be combined with the article\(^{52}\). It should be noted that a considerable amount of these nouns in our corpus are plant names. Some examples are:

\[
\begin{align*}
\text{bušuk} & \quad \text{‘iron fence’} \\
\text{budæn} & \quad \text{‘kind of pasta’} \\
\text{buḥbel} & \quad \text{‘life’} \\
\text{buḥrawa} & \quad \text{‘bird’ (sp.)} \\
\text{quṛrayes} & \quad \text{‘insect’ (sp.)} \\
\text{qlallu} & \quad \text{‘plant’ (sp.)} \\
\text{kersanna} & \quad \text{‘bitter vetch’} \\
\text{gesbaṭṭa} & \quad \text{‘plant’ (sp.)} \\
\text{gamba} & \quad \text{‘shrimp’} \quad (\text{< Sp.}) \\
\text{gana} & \quad \text{‘interest’} \quad (\text{< Sp.})
\end{align*}
\]

One of these singularia tantum is a compound made up out of serraq ‘thief’ + zziṯ ‘oil’. It does not take an article.

\[
\begin{align*}
\text{serraqzziṯ} & \quad \text{‘cockroach’}
\end{align*}
\]

\(^{52}\) Part of the nouns in this group have the element bu-. In some cases it can without problems be historically analysed as the prefix bu-.
6. The verbal noun

Verbal nouns are nouns derived from verbs. In Ghomara Berber by far most verbal nouns are derived from Arabic, meaning that verbs that are of Berber etymology have suppletive verbal nouns (the verbal noun is referred to as maṣdar in Arabic). Verbal nouns express ‘the fact of (...) finishing a transitive or intransitive action, coming into a state’ (cf. Marçais, 1977:83). The feminine suffix -a can be a singulative marker in verbal nouns, e.g. ḍrab, ḍarb ‘the fact of hitting’ > ḍerba-a = ‘one hit’. An effect is that ‘fréquemment lorsqu’on ajoute aux formes en usage la finale -a, ils acquièrent une valeur concrète’, except for the verbal nouns with the form ccvc-a which do not get such an interpretation (cf. Marçais 1977:85). The number of verbal nouns attested in our corpus is quite limited. They are difficult to elicit and many verbs do not have a verbal noun. In the following overview the types of verbal nouns found are presented. The verbs from which they are derived will be presented as well. Note that sometimes derived verbs (mostly stem II) correspond to verbal nouns that correspond to underived nouns in Arabic.

6.1. Non-derived nouns

cvcc / ccvc

<table>
<thead>
<tr>
<th>verb</th>
<th>VN</th>
<th>meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>ḥezzen</td>
<td>l-huzen</td>
<td>‘the fact of grieving’</td>
</tr>
<tr>
<td>hewwel</td>
<td>l-hawl</td>
<td>‘the fact of disturbing’</td>
</tr>
<tr>
<td>rεeḇ</td>
<td>r-rueḇ</td>
<td>‘the fact of scaring’</td>
</tr>
<tr>
<td>qeyyes</td>
<td>le-qyas</td>
<td>‘the fact of mesuring’</td>
</tr>
<tr>
<td>dleḡ</td>
<td>d-dliḡ</td>
<td>‘the fact of rubbing’</td>
</tr>
<tr>
<td>qret</td>
<td>le-qriṭ</td>
<td>‘the fact of breaking’</td>
</tr>
<tr>
<td>freq</td>
<td>le-fraq</td>
<td>‘the fact of separating’</td>
</tr>
</tbody>
</table>

ccvc-a

In this scheme the a does not mark the singulative. Rather, nouns having this scheme are nouns ‘exprimant la manière de faire, où l’exercice d’un métier’ (Marçais 1977:86). For example:

<table>
<thead>
<tr>
<th>verb</th>
<th>VN</th>
<th>meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>fhem</td>
<td>le-fham-a</td>
<td>‘the fact of understanding’</td>
</tr>
<tr>
<td>fleḥ</td>
<td>le-flaḥ-a</td>
<td>‘the fact of cultivating’</td>
</tr>
<tr>
<td>xeyyeṭ</td>
<td>le-xyaṭ-a</td>
<td>‘the fact of sewing’</td>
</tr>
</tbody>
</table>

ccc(-a)

<table>
<thead>
<tr>
<th>verb</th>
<th>VN</th>
<th>meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>ḥteš</td>
<td>le-hṭeš</td>
<td>‘the fact of collecting bush’</td>
</tr>
<tr>
<td>rbeḥ</td>
<td>r-rbeḥ</td>
<td>‘the fact of earning’</td>
</tr>
<tr>
<td>ezel</td>
<td>l-eezl-a</td>
<td>‘the fact of separating’</td>
</tr>
</tbody>
</table>
According to Marçais (1977:85) a ccuc verbal noun ‘caractérise des verbes exprimant un mouvement, une attitude de corps’. There is one example in our corpus:

\[kšem\] ‘enter’  \[d-\text{dxul}\] ‘the fact of entering’

\textbf{cvc (hollow)}

\[ṣum \sim ṣam\] ‘fast’  \[ṣ-\text{sum}\] ‘the fact of fasting’
\[zzenz \sim znez\] ‘sell’  \[l-bie\] ‘the fact of selling’

\textbf{ccv (defective)}

\[žerri\] ‘run’  \[le-\text{ğri}\] ‘the fact of running’
\[qqim\] ‘stay’  \[le-bqa\] ‘the fact of staying’
\[ssyas / yli\] ‘boil’  \[le-\text{yli}\] ‘the fact of boiling’
\[xṛa\] ‘defecate’  \[le-xṛa\] ‘the fact of defecating’
\[rrḍa\] ‘exceptance’  \[r-rḍa\] ‘the fact of excepting’
\[ddu\] ‘go’  \[le-mği\] ‘the fact of going’
\[ddu \ d\] ‘come’  \[le-mği\] ‘the fact of coming’

Berber-etymology verbs have suppletive verbal nouns of different types.

\[ṭṭeṣ\] ‘sleep’  \[n-\text{neas}\] ‘the fact of sleeping’
\[serweṯ\] ‘thresh’  \[d-\text{dras}\] ‘the fact of threshing’
\[werg\] ‘dream’  \[le-\text{mnam}\] ‘the fact of dreaming’
\[wwet\] ‘hit’  \[d-\text{dėr-b}\] ‘the fact of hitting’
\[ffuɣ\] ‘go out’  \[l-\text{xurž-a}\] ‘the fact of going out’
\[ara (kteḇ)\] ‘write’  \[l-\text{kṭab-a}\] ‘the fact of writing’
\[yres\] ‘slaughter’  \[d-\text{dbih-a}\] ‘the fact of slaughtering’
\[ssendu\] ‘churn’  \[le-mxiṭ\] ‘the fact of churning’
\[nu\] ‘be cook’  \[t-\text{tyab}\] ‘the fact of cooking’

One verb with Arabic etymology corresponds to a verbal noun of different Arabic origin.
\[ɛeyyɛṛ\] ‘play’  \[l-\text{leeb}\] ‘the fact of playing’

\subsection*{6.2. Derived nouns}

In the following overview the attested verbal nouns with Arabic derived schemes are presented. All these verbal nouns can get an -\text{a} suffix to get a more concrete meaning. There are no examples of verbal nouns of stem III.
Mostly cCc (stem 2) verbs correspond to these schemes.

derreɛ 'embrace' t-tedriɛ 'the fact of embracing'
kemmeʃ 'winkled' t-teškiš 'the fact of winkling'
šekkem 'squeal' t-teškiš 'the fact of squealing'
ḥelleq 'fish' t-teḥliq 'the fact of fishing'
reqqeɛ 'repair clothes' t-terqiɛ 'the fact of repairing'
sqef 'roof' t-tešqiɛ 'the fact of making a roof'
debbey 'weed' t-tedbiy 'the fact of weeding'
felleq 'cut in half' t-tefliq 'the fact of cutting in half'
felleḥ 'burst, dispose of' t-teflĭh 'the fact of bursting'
heddeḏ 'threat' t-teḥdiḏ 'the fact of threatening'
hemmek 'hit' t-teḥmiḵ 'the fact of hitting'
melleḥ 'salt' t-t emoclih 'the fact of salting'
nedder 'shock after crying' t-tendir 'the fact of shocking'
qeṣṣeṣ 'cut' t-teqṣiṣ 'the fact of cutting'
herq 'feel pain' t-teḥṛiq 'the fact of feeling pain'
sellem 'permit' t-tešlisim 'the fact of permitting'
seğeč 'be brave' t-teszič 'the fact of being brave'
šebbeṛ 'catch' t-tešbiṛ 'the fact of catching'
eerref 'authenticate' t-teṣirif 'the fact of authenticating'
eerref 'invite' t-teṣirif 'the fact of inviting'
seffer 'whistle' t-teṣrif 'the fact of whistling'
zewróer 'forge' t-tezwir 'the fact of forging'
tʔekkeḍ 'guarantee' t-teʔkiḍ 'the fact of guaranteeing'

There is one verbal noun which has the same scheme but a different vowel.

qeṭṭeɛ 'cut' t-teqṭuɛ 'the fact of cutting'

There are two verbal nouns which have an initial t and an -a suffix. A glide is inserted between the base and the suffix. The verbal nouns are both derived from defective stem II verbs.

rebbi 'raise' t-terbiyy-a 'the fact of raising'
lewwi 'roll' t-teλwiyy-a 'the fact of rolling'
There are a couple of four-consonantal verbal nouns which all have a t- prefix. These verbal nouns can get an -a suffix as well.

<table>
<thead>
<tr>
<th>Verbal Noun</th>
<th>Meaning</th>
<th>T-prefix</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>qerfez</td>
<td>‘pinch’</td>
<td>t-qerfiz</td>
<td>‘the fact of pinching’</td>
</tr>
<tr>
<td>beryez</td>
<td>‘swap’</td>
<td>t-beryiz</td>
<td>‘the fact of swapping’</td>
</tr>
<tr>
<td>bežyet</td>
<td>‘mumble’</td>
<td>t-bežyiṭ</td>
<td>‘the fact of mumbling’</td>
</tr>
<tr>
<td>heshes</td>
<td>‘whisper’</td>
<td>t-hesḥis</td>
<td>‘the fact of whispering’</td>
</tr>
</tbody>
</table>

6.3. Berber verbal nouns

The verbal nouns with Berber morphology are very few in number. We have found the following verbal nouns which have a corresponding verb. They are all used in idiomatic expressions.

<table>
<thead>
<tr>
<th>Verbal Noun</th>
<th>Meaning</th>
<th>A-prefix</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>ɛayen</td>
<td>‘look’</td>
<td>a-ɛayen</td>
<td>‘the fact of looking’</td>
</tr>
<tr>
<td>bzeği</td>
<td>‘be wet’</td>
<td>a-ẓuḡ</td>
<td>‘the fact of being wet’</td>
</tr>
<tr>
<td>mḡer</td>
<td>‘harvest’</td>
<td>a-mḡer</td>
<td>‘the fact of harvesting’</td>
</tr>
</tbody>
</table>

Examples of their use are:

1. **i-ttkk = as a meyayen**
   3MS-give:I = 3S:IO look:EL
   ‘He gives it a look.’

2. **ga-s azzuḡ**
   in-3S wetness:EL
   ‘He is wet.’

3. **a ne-kmel amḡer**
   AD 1PL-finish:A harvest:EL
   ‘We will finish harvest.’
7. The Verb

There exist two groups of verbs in Ghomara Berber; the Berber-morphology group, and the Arabic-morphology group. Verbs which have Berber morphology take Berber inflection, whereas verbs which have Arabic morphology preserve their original Arabic inflection. The Berber-morphology class has integrated many borrowed verbs from dialectal Arabic. However, a number of borrowed Arabic verbs (about 19% of the total of Berber- and Arabic-morphology verbs in our corpus) are taken over including their original morphology. All Arabic verb types can be borrowed with preservation of the original Arabic morphology, with two exceptions: cCc (stem II) and cacc (stem III) verbs never keep Arabic inflection when borrowed. These two types consist (almost) completely of borrowed Arabic verbs which are integrated in the Berber morphological system. On the other hand, derived verbs (with tt- (~t-) or n- prefix) are never integrated in the Berber morphological system. These verbs are always conjugated using Arabic morphology. For example:

<table>
<thead>
<tr>
<th>Arabic morphology</th>
<th>Berber morphology</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Non-derived</strong></td>
<td><strong>tt- (t-) / n- derived</strong></td>
</tr>
<tr>
<td><em>fhem</em> ‘understand’</td>
<td><em>tt</em>- (t-) / <em>n</em>- derived*</td>
</tr>
<tr>
<td><em>fleḥ</em> ‘cultivate’</td>
<td><em>t-keyyef</em></td>
</tr>
<tr>
<td><em>sken</em> ‘live’</td>
<td><em>t-qiyya</em></td>
</tr>
<tr>
<td><em>kṛeh</em> ‘hate’</td>
<td><em>t-ḥerrek</em></td>
</tr>
<tr>
<td><em>kri</em> ‘rent’</td>
<td><em>n-bac</em></td>
</tr>
<tr>
<td></td>
<td><em>ne-dfee</em></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Berber morphology</strong></th>
<th><strong>ccc</strong></th>
<th><strong>cCc</strong> (stem II)</th>
<th><strong>cacc</strong> (stem III)</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>freq</em> ‘separate’</td>
<td><em>xebbeɛ</em></td>
<td><em>ṣahel</em></td>
<td>‘make easy’</td>
</tr>
<tr>
<td><em>qleḥ</em> ‘flip’</td>
<td><em>šebbeṛ</em></td>
<td><em>ḥawel</em></td>
<td>‘try’</td>
</tr>
<tr>
<td><em>hleḵ</em> ‘be sick’</td>
<td><em>ɛeqqeq</em></td>
<td><em>eafɛr</em></td>
<td>‘try’</td>
</tr>
</tbody>
</table>

The question arises if there is a pattern in this distribution of the borrowings. To some extent transitivity plays a role as tt- and n- derivation are often detransvisers (used for passive formation). This is, however, not always the case, for example *t-keyyef* ‘smoke’ is a transitive verb. On the other hand cCc (and similar stem II verbs) and cacc (and similar stem III) verbs are mostly transitive. In the choice of inflectional system with non-derived verbs, transitivity does not seem to play a role. Thus, among the Arabic-morphology group there are both intransitive and transitive non-derived verbs, e.g. the intransitives *sker* ‘be drunk’ and *tfa* ‘yawn’ and the transitives *qṛa* ‘read, study’ and *kri* ‘rent’. The borrowing patterns are not based on a semantic distribution either.
Both integrated and non-integrated verbs refer to basic events such as sneezing, sweating, being embarrassed, being accustomed, farming, hating etc. For example the verbs ɛya ‘be tired’ with Arabic morphology and hleḵ ‘be sick’ with Berber morphology have similar semantics, but different morphology. In this chapter the Berber-morphology verb is presented first. Then, the formation of the Perfective will be discussed after which the Imperfective will be discussed. The second chapter will deal with the Arabic-morphology verb. tt- and n- derived verbs will be discussed in the Arabic-morphology part, whereas the ss- causative of the Perfective and the Imperfective are presented separately.

7.1. The Berber-morphology verb

The Berber-morphology verb consists of a lexical base, made up of consonants and (optionally) plain vowels. Schwa does not play a role in the structure of a base. In the traditional account the base is a combination of an abstract consonantal root, which conveys lexical information, and a vowel scheme, which conveys grammatical information (e.g. Harrell, 1962: 23-28 for Arabic, cf. Galand, 2002: 87-99 for a discussion of Berber). However, this dichotomy is too simple. There are many examples of roots in which both the consonants and the vowels convey lexical information. These problems were addressed, among others, by David Cohen (1993) who proposes that a vowel can be part of the radical in the same way as a consonant can. In addition, consonant gemination may be specified in the root. This view eliminates most of the homonyms that would exist if one assumed only a consonantal root (D. Cohen, 1993: 170). If one were to assume a consonantal root r one runs into trouble differentiating for example rri ‘return’, aru ~ uru ‘give birth’ and ara ~ ura ‘write’; similarly, if consonant gemination does not play a role the root qlb yields both qleḇ ‘roll’ and qelleḇ ‘taste’ in Ghomara Berber. Another argument is that many vowel schemes do not convey grammatical information, for instance the verb ‘have lunch’ has mṭi in the Aorist and the Perfective and meṭṭi in the Imperfective (cf. Kossmann, 1997:130). Therefore, we will adopt the position of David Cohen and define root structure as a concatenation of consonant and plain vowel positions. The consonantal part of the root contains mainly lexical information, while the (plain) vowels contain lexical as well as grammatical information. This combination constitutes the lexical base. The derivational prefix is added to the lexical base. Then, in order to attain a well-formed verbal form, the lexical base is moulded into one of three aspectual forms. The formation of these forms uses different morphological devices, most important of which are vowel apophony, vowel insertion, consonantal gemination and the Imperfective prefix tt. The verb form with derivational and aspectual marking is called the ‘aspectual stem’. The verb is completed by adding personal affixes in the form of prefixes, suffixes or circumfixes. Schematically, the maximal structure of a Berber verb is as follows:

person – (tt) – aspectual lexical base - person

(1) \( te \quad tt \quad \text{beddal} \quad et \)
2S  I  change:I  2S
‘You always change.’

For ss- derived verbs the structure is:

(2) \( te \quad ss \quad \text{lcam} \quad em \)
2PL  CAUS  reach:I  2PL
‘You make arrive.’

In the following, we first present the verbal conjugational affixes. After this, the aspectual stems are discussed. Causative derivation will be treated separately.

7.2. The verbal affixes

The subject affixes of the verb express three persons, two genders and two numbers. Masculine and feminine gender are only differentiated in the third person singular\(^{54}\). The verbal affixes consist of three sets; the ‘normal’ affixes, the Imperative / adhortative suffixes and the participial affix. There are traces of a fourth set, the ancient ‘stative’ conjugation, which in Ghomara Berber have become part of adjectival morphology and cannot be considered verbal anymore (see III.9.). Normal affixes are either prefixes (3MS/3FS, 1PL), circumfixes (2S, 2PL) or suffixes (1S, 3PL). Imperatives take no affixes in the singular, the plural is expressed by means of the affix \(-\text{awet}\) or \(-\text{at}\). The participle is formed by a circumfix which does not express person, number or gender. The first person suffix is \(-x\) following a vowel (cf. II.3.5.). The normal affixes are:

\[ \begin{array}{|c|c|c|c|c|}
\hline
\text{person} & \text{suffix} & \text{verb} & \text{person} \\
\hline
1:SG & \ldots - ax /-ay/-x & \text{nte}\text{\text{"e}} & \text{alu} & \text{tu}x \\
2:SG & t\ldots - et & \text{nte}\text{\text{"e}}-et & \text{he} & \text{ttalu-t} \\
3:M:SG & i\ldots & \text{i-nte}\text{\text{"e}} & \text{i} & \text{ttalu} \\
3:F:SG & t\ldots & \text{t-ente}\text{\text{"e}} & \text{he} & \text{ttalu} \\
1:PL & n\ldots & \text{n-ente}\text{\text{"e}} & \text{ne} & \text{ttalu} \\
\hline
\end{array} \]

\(\text{nte}\text{\text{"e}}\) ‘fly’ (P) \(\text{alu}\) ‘pick’ (I)

\(^{54}\) In pronouns, one also finds a gender difference between masculine and feminine in the second person singular, see III.11.

\(^{55}\) See paragraph II.1.2. for different forms of the prefix t.
The Imperative and injunctive affixes

The Imperative singular has no affix. The plural is marked by means of the suffix -awet or -at. The suffix does not change when following a verb ending in a vowel. The final vowel becomes a glide. Very often schwa appears at the beginning of the singular form of the Imperative.

Example

2:SG …-Ø (e)nteḡ ‘jump!’
2:PL …-awet ~ at netḡ-awet ~ netḡ-at ‘jump!’ (PL)

The verb ddu ‘go’ has an irregular form with an initial n and an h in the plural of the Imperative.

2:SG nda ‘go!’
2:PL ndhu ‘go!’ (PL)

There are verbs which only occur in the Imperative, such as:

2:SG hala ‘come!’
2:PL hala-w ‘come!’ (PL)

2:SG ara ‘give!’
2:PL ara-w ‘give!’ (PL)

The form ara ‘give’ takes direct object pronouns and the deictic clitic.

(3) ara = h = id
    give:IMP = 3MS:DO = DC
    ‘Give it to me.’

Several Imperatives can follow each other to form a sequence, for example:

(4) kkur nda keği a sahabi
    get.up:IMP go:IMP you:M VOC friend
    ‘You get up and go, buddy.’
In addition, there exists an injunctive form, which encourages the addressee to do something together with the speaker. This form combines the ‘normal’ prefix of the first person plural n- with the Imperative plural suffix -awet ~ -at. The non-real marker a always precedes the injunctive verb.

1:PL  n-...-awet

(5)  a  n-kerz-awet
    AD  1PL-plough:A-PL:IMP
    ‘Let’s work the land.’

Negation of the Imperative uses the normal second person forms of the Aorist and is preceded by the non-real marker a. Negation is accomplished by the elements ma...šī. The same construction is used to negate non-realised events. In the examples both translations are given.

(6)  ma  ya  kerz-et  šī
do NEG AD plough:A-2:S NEG
    ‘Do not plough! / You will not plough. (S)’

(7)  ma  ya  kerz-em  šī
do NEG AD plough:A-2PL NEG
    ‘Do not plough! / You will not plough. (PL)’

7.4. The relative form

The relative form consists of a prefix i (before consonants) or y (before vowels) and a suffix -n. In Berber literature this form is the traditionally known as the ‘participle’. As the Arabic participle plays an important role in Ghomara Berber we have decided to use the term ‘relative form’ to avoid confusion. In many Berber languages it is the verbal form that appears in subject relative constructions. Adjectives have a special relative form as well (cf. III.9.1.). The reason why it is not called the subject relative form is because its use goes beyond subjects and the verb does not get a relative form in subject relative clauses of a ra a + Aorist (cf. III.5.9. on relative constructions).

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56 In Arabic the negative imperative is formed by negating the Imperfect, ma deḥret šī can mean both ‘do not plough’ as well as ‘you will not plough’ in which an Imperfect is used. The Ghomara Berber parallel to the Imperfect is the a + Aorist.

57 The form of the suffix is -n after a vowel and -en after a consonant.
### Relative form Examples

\[ i-\text{tti}\text{tu}-n \]  ‘go’ (I)
\[ y-u\text{k}r-en \]  ‘steal’ (P)

There is one verb which appears only in its relative form in the following question:

(8)  \[ ma \ k = y-uyu-n? \]
\[ \text{what} \ 2\text{S:DO} = \text{RL-be.matter-RL} \]
‘What is the matter with you?’

#### 7.5. The aspectual stems

Berber-morphology verbs distinguish three aspectual stems: the Aorist, the Perfective and the Imperfective\(^{58}\). Contrary to many other Berber varieties there are no negative aspectual stems\(^{59}\). The Aorist and Perfective stems are very often homophonous. Only a few types mark the difference between the two stems. The Imperfective mostly differs from the other stems, but there are a few cases of homophony. Most verbs distinguish two forms, the Aorist/Perfective and the Imperfective as in 2 ‘plough’. Some verb types have separate stems for all three aspects as in 1 ‘pick’. There are some verbs in which the three stems have the same form, as in 3 ‘cry’. Homophony of the stems is determined by the formal make-up of the root (e.g. ve\text{c} as opposed to cc\text{c} roots), and is not related to the semantics of the verb, for example:

<table>
<thead>
<tr>
<th>1. ‘pick’</th>
<th>2. ‘plough’</th>
<th>3. ‘cry’</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aorist</td>
<td>alu</td>
<td>krez</td>
</tr>
<tr>
<td>Perfective</td>
<td>ulu</td>
<td>krez</td>
</tr>
<tr>
<td>Imperfective</td>
<td>ttalu</td>
<td>kkrez</td>
</tr>
</tbody>
</table>

Aorist forms are taken as the basis in describing the forms of the other aspectual stems. Base structure is presented in the form of unspecified consonant positions (using c for single consonants and C for geminates) and specified vowel positions (a, i, u), according to the vocalisation of the Aorist. When necessary, instead of specifying the vowel (a, i, u), v is used to convey the presence of the plain vowels in the structure.

---

\(^{58}\) In the French literature on Berber the terminology by A. Basset and Galand is often used. Basset’s ‘prétérit’ and ‘Aoriste intensif’ correspond to our ‘Perfective’ and ‘Imperfective’ respectively. Galand’s ‘accompli’ and ‘inaccompli’ correspond to our ‘Perfective’ and ‘Imperfective’ respectively. The use of ‘Aorist’ is also found with Basset and Galand (Basset, 1952: 13, Galand, 2010: 207-232).

\(^{59}\) However, many western varieties of Senhaja de Srâîr, geographically closest to Ghomara, do not have negative (Perfective or Imperfective) stems (Laïkioui, 2007: 175, 176). The absence of a negative stem is found in certain dialects of Tashelhîyât in the region of Agadir as well (Aspinion, 1953: 223, 231).
7.5.1. The Aorist

Different from some Perfective verb forms, the form of the Aorist remains the same in all persons. There is one exception, which is the Aorist of the verb ḫl‘be’. In the variety used by an older speaker (73 years old) the stem has the vowel i when a person suffix is present. In the first person singular, this i takes the place of suffix-initial a. Younger speakers have no person-based changes. The full Aorist paradigm of this verb is:

‘be’ (A)
1:SG ḫl-ax ～ ṭl-li-x
2:SG ṭe-llx-et ～ ṭe-llx-li-
3:MS:SG ḫl
3:FS:SG ṭe-llx
1:PL ṭe
2:PL ṭe-llx-em ～ ṭe-llx-li-
3:PL ṭe-llx-en ～ ṭe-llx-li-

7.5.2. The Perfective

Only a minority of the Berber-morphology verbs (12%) show a formal distinction between Aorist and Perfective forms by means of a vowel change (including labialisation). The most frequent structures with identical Aorist and Perfective are given below.

<table>
<thead>
<tr>
<th>Aorist</th>
<th>Perfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>ḫmeṭ</td>
<td>ḫmeṭ</td>
</tr>
<tr>
<td>ṭeṭṭ</td>
<td>ṭeṭṭ</td>
</tr>
<tr>
<td>ṭeddėl</td>
<td>ṭeddėl</td>
</tr>
<tr>
<td>ṭenni</td>
<td>ṭenni</td>
</tr>
<tr>
<td>ṭefqef</td>
<td>ṭefqef</td>
</tr>
<tr>
<td>ṭeṣen</td>
<td>ṭeṣen</td>
</tr>
<tr>
<td>ṭṭeṣ</td>
<td>ṭṭeṣ</td>
</tr>
</tbody>
</table>

It is interesting to note that in the fixed expression aṛaḫ ṭlla ‘that might be’ the third person masculine form verb ends in an a.

eCe (and other geminated stem II verbs) are by far the most numerous verbs in our corpus. This type consists almost without exception of (integrated) verbs borrowed from Arabic. Verbs of this type can be intensive, de-nominal verbs, de-adjectival verbs, and causative verbs (cf. Marçais 1955: 179).

Note that this type also contains verbs that change the final vowel in the Perfective.
As by far most verbs in our corpus are of the cCc type this structure merits some comments. While in local Arabic ṑrež ‘limp’ is used, in Ghomara Berber čeřrež ‘limp’ is used. Other examples which have underived forms in Arabic, but have geminated forms in Berber are Arabic ṣṭer Berber qeṭṭer ‘drip’ and Arabic ṑder, Berber nedder ‘shock after crying’.

Examples of de-nominalised forms are zeḥhem ‘narrow’ from zẓham ‘narrowness’ and deḥḥes ‘crowd’ from ddḥas ‘crowdedness’. De-adjectival forms are quite numerous, e.g. eewwež ‘bend’ (< ewez ‘be bent’), ḥewwel ‘make crooked’ (< ḥwel ‘be crooked’), wesssee ‘widen’(< wasee ‘be wide’), ṭeṭṭeb ‘soften, smoothen’(< ṭeṭeb ‘soft, smooth’), ṭewwel ‘lenghten’ (< ṭwil ‘be tall’), qesṣeṛ ‘shorten’ (< qṣiṛ ‘be short’). Many other verbs are not derived from another word class (For causatives of this type see paragraph III.3.2.1.2).

In the remaining part of this section, verbs which distinguish the Aorist from the Perfective be presented. There are several types. There are verbs which have labialised consonants in the Aorist and loose the labialisation in the Perfective. The verb types cc, C, cu, Ci add the vowel a either throughout the paradigm or before a suffix in the Perfective. Verbs that have an initial a or a ~ u in the Aorist change it to u in the Perfective. The verb types cic, cicc/ccic and cuc have medial vowel change in the Perfective, while the verb types ccu, Cu, cCi, cac, cci have final vowel change. Finally, there are some exceptional types.

Cc verbs with labialised consonants only have labialisation in the Aorist (for labialisation cf. II.4.). In the Perfective (and Imperfective) labialisation dissappears. There is one ccc and one cc verb which are similar.

<table>
<thead>
<tr>
<th>Aorist</th>
<th>Perfective</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>kkur</td>
<td>kker</td>
<td>‘stand up’&lt;sup&gt;63&lt;/sup&gt;</td>
</tr>
<tr>
<td>qqul</td>
<td>qqel</td>
<td>‘return’</td>
</tr>
<tr>
<td>gguz</td>
<td>ggez</td>
<td>‘descend’</td>
</tr>
<tr>
<td>kkus</td>
<td>kkes</td>
<td>‘remove’</td>
</tr>
<tr>
<td>qqun</td>
<td>qqen</td>
<td>‘tie, close’</td>
</tr>
<tr>
<td>ffuɣ</td>
<td>ffey</td>
<td>‘go out’</td>
</tr>
<tr>
<td>źẓuɣ (~ ẓẓeɣ)</td>
<td>ẓẓeɣ</td>
<td>‘milk’</td>
</tr>
</tbody>
</table>

<sup>63</sup> For this verb labialisation is optional in the imperative plural but not in the singular:

- ukkr-awet ~ ekkr-awet ‘stand up’ IMP:PL
- kkur ~ *kker ‘stand up’ IMP:S
7.5.2.1. Addition of the vowel a in the Perfective

The first group consists of verbs with the structures cc, C, cu and Ci. In the Perfective, the vowel a is added either to the complete paradigm, or only before a conjugational suffix.

7.5.2.2. cc verbs

There are only few verbs with the structure cc. These verbs belong to three different types, according to their Perfective conjugation. Type 1 always has an a ending in the Perfective irrespective of suffixation. The only verb of this type is nuɣ (/nyʷ/) ‘kill’. Type 2, adds the a in the Perfective only when the verb has an inflectional suffix. The verbs nes ‘be extinguished’, kes ‘herd’, zer ‘see’, fk ‘give’ and res ‘land’ belong to this type. The third type of cc verbs does not change at all. It consists of four verbs: med ‘finish’, zed ‘grind’ mel ‘show’ and suɣ ‘buy’. The verb reɣ ‘be lit’ can be inflected according to type 1 or type 3. In the Aorist these verbs do not have a vowel. Relative forms of verbs of type 1 and 2 verbs have an a before the relative suffix. The other ones take either -en or -an. The full Perfective paradigms of the first two types of verbs are given below.

<table>
<thead>
<tr>
<th>Type 1</th>
<th>Type 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>nuɣ ‘kill’</td>
<td>fk ‘give’</td>
</tr>
<tr>
<td>1:SG nya-x ‘I have killed’</td>
<td>fka-x ‘I gave’</td>
</tr>
<tr>
<td>2:SG te-nya-t ‘You have killed’</td>
<td>te-fka-t ‘You gave’</td>
</tr>
<tr>
<td>3:SG i-nya ‘He has killed’</td>
<td>i-fk ‘He gave’</td>
</tr>
<tr>
<td>3:F:SG te-nya ‘She has killed’</td>
<td>te-fk ‘She gave’</td>
</tr>
<tr>
<td>1:PL ne-nya ‘We have killed’</td>
<td>ne-fk ‘We gave’</td>
</tr>
<tr>
<td>2:PL te-nya-m ‘You have killed’</td>
<td>te-fka-m ‘You gave’</td>
</tr>
<tr>
<td>3:PL nya-n ‘They have killed’</td>
<td>fka-n ‘They gave’</td>
</tr>
</tbody>
</table>

Two of the four cc verbs which never add a vowel in the Perfective are given below:

---

64 In the dialect of Amṭiqan this verb only has a when followed by a suffix (El Hannouche 2010: 256).
med ‘be finished, be extinguished’  zed ‘grind’

1:SG  mḏ-ax  ‘I am finished’  żd-ax  ‘I grind’
2:SG  te-mḏ-et  ‘You are finished’  te-żd-et  ‘You ground’
3:M:SG  i-med  ‘He is finished’  i-żed  ‘He ground’
3:F:SG  t-med  ‘She is finished’  t-żed  ‘She ground’

1:PL  n-med  ‘We are finished’  n-żed  ‘We ground’
2:PL  te-mḏ-em  ‘You are finished’  te-żd-em  ‘You ground’
3:PL  mḏ-en  ‘They are finished’  żd-en  ‘They ground’

7.5.2.3. (w)C verbs

This type of verb consists of one geminate consonant in the Aorist. In the Perfective these verbs add an a before a suffix. The one exception is the verb nn ‘say’ which optionally has an ending a in every person of the Perfective. It is therefore the only verb of this type that has type 1 endings (see above). We will give the example of the aforementioned verb nn and its variants and the second example of the verb šš ‘eat’. Other verbs of this type are ḡḡ ‘do/make’, bb ‘take/bring’, ll ‘be’ and ǧ ~ wǧ ‘leave’65. The relative forms have an a before the relative suffix.

nn ‘say’  šš ‘eat’

1:SG  nna-x  ‘I said’  šša-x  ‘I ate’
2:SG  te-nna-t  ‘You said’  te-šša-t  ‘You ate’
3:M:SG  i-nn ~ i-nna  ‘He said’  i-šš  ‘He ate’
3:F:SG  te-nn ~ te-nna  ‘She said’  te-šš  ‘She ate’

1:PL  ne-nn ~ ne-nna  ‘We said’  ne-šš  ‘We ate’
2:PL  te-nna-m  ‘You said’  te-šša-m  ‘You ate’
3:PL  nna-n  ‘They said’  šša-n  ‘They ate’

7.5.2.4. cu verbs

There are two verbs of this type. In the Perfective, the verb su ‘drink’ takes a when followed by suffix; the verb nu ‘be cooked/ripe’ always takes an a. These verbs have an underlying semi-vowel w which becomes u in final position (cf. II.2.1. phonology). The relative forms have an a before the relative suffix.

65 Note that we have put this verb in this type consisting of a single geminate consonant. The fact that this is a geminate is shown by deaffrication when the geminate occurs in final position e.g. i-žž ‘he left (something)’. Note also the difference between the singular imperative ژژ ‘leave it!’ and the plural imperative ǧ-awet ‘leave (PL) it!’ (cf. II.1.3. phonology).
<table>
<thead>
<tr>
<th>Person</th>
<th>Aorist</th>
<th>Perfective</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:SG</td>
<td>su 'drink'</td>
<td>nwa-x</td>
<td>'I drank'</td>
</tr>
<tr>
<td>2:SG</td>
<td>te-swa-t</td>
<td>te-nwa-t</td>
<td>'You drank'</td>
</tr>
<tr>
<td>3:SG</td>
<td>i-su</td>
<td>i-nwa</td>
<td>'He drank'</td>
</tr>
<tr>
<td>3:F:SG</td>
<td>t-su</td>
<td>te-nwa</td>
<td>'She drank'</td>
</tr>
<tr>
<td>1:PL</td>
<td>n-su</td>
<td>ne-nwa</td>
<td>'We drank'</td>
</tr>
<tr>
<td>2:PL</td>
<td>te-swa-m</td>
<td>te-nwa-m</td>
<td>'You drank'</td>
</tr>
<tr>
<td>3:PL</td>
<td>swa-n</td>
<td>nwa-n</td>
<td>'They drank'</td>
</tr>
</tbody>
</table>

7.5.2.5. Ci verb

There is one verb of this structure which optionally adds vowel a. It is conjugated in three different ways, which are in free variation.

<table>
<thead>
<tr>
<th>Person</th>
<th>Aorist</th>
<th>Perfective</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:SG</td>
<td>rri 'return'</td>
<td>rra-x</td>
<td>'I returned'</td>
</tr>
<tr>
<td>2:SG</td>
<td>te-rrya-t</td>
<td>te-rra-t</td>
<td>'You returned'</td>
</tr>
<tr>
<td>3:SG</td>
<td>i-rrya</td>
<td>i-rra</td>
<td>'He returned'</td>
</tr>
<tr>
<td>3:F:SG</td>
<td>te-rrya</td>
<td>terri</td>
<td>'She returned'</td>
</tr>
<tr>
<td>1:PL</td>
<td>ne-rrya</td>
<td>ne-rra</td>
<td>'We returned'</td>
</tr>
<tr>
<td>2:PL</td>
<td>te-rrya-m</td>
<td>te-rra-m</td>
<td>'You returned'</td>
</tr>
<tr>
<td>3:PL</td>
<td>rrya-n</td>
<td>rra-n</td>
<td>'They returned'</td>
</tr>
</tbody>
</table>

7.5.2.6. Initial vowel change

Verbs that change the initial vowel always involve changing a or a ~ u in the Aorist to u to in the Perfective. In a number of cases, mostly verbs that have one consonant, the Aorist shows free variation between a and u as an initial vowel. Our corpus contains one verb that shows free variation between Ø and u in the Perfective.

The following verbs change a in the Aorist to u in the Perfective. The first two verbs have optionally labialised consonants in the Aorist. This does not occur in the Perfective (cf. II.4. on labialisation).

<table>
<thead>
<tr>
<th>Aorist</th>
<th>Perfective</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>akel ~ akul (a[kw]el/)</td>
<td>ukel</td>
<td>'step on'</td>
</tr>
</tbody>
</table>

---

66 This can be used metaphorically to signify that someone is too hot.
The verb aḡem d ‘draw water’ and its variants have the deictic particle ‘hither’ obligatorily following or preceding the verb, depending on the syntactic context (cf. IV.3.3.5.). When the deictic particle is in initial position the verb is no longer analysed as vowel-initial, and there is no vowel change a > u. Therefore the deictic particle d / id can be no longer analysed as such in initial position, but should be considered part of the verbal base. In the Aorist the consonant ġ can be labialised ġu (/ḡw/).

The following verbs show free variation between a ~ u in initial position in the Aorist.

<table>
<thead>
<tr>
<th>Aorist</th>
<th>Perfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>aḡem d ~ aşem d (/aḡem d/)</td>
<td>uḡem d ~ daḡem</td>
</tr>
<tr>
<td>~ daḡem ~ daḡum (/daḡem/)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Aorist</th>
<th>Perfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>af ~ uf</td>
<td>uf</td>
</tr>
<tr>
<td>as d ~ us d</td>
<td>us d</td>
</tr>
<tr>
<td>ara ~ ura</td>
<td>ura</td>
</tr>
<tr>
<td>aru ~ uru</td>
<td>uru</td>
</tr>
<tr>
<td>ani ~ uni</td>
<td>uni</td>
</tr>
<tr>
<td>aggez ~ uggez</td>
<td>uggez</td>
</tr>
<tr>
<td>aḡel ~ uğel ~ aşel (/aḡel/)</td>
<td>uğel</td>
</tr>
</tbody>
</table>

One verb in our corpus shows free variation between initial Ø and u in the Perfective.

<table>
<thead>
<tr>
<th>Aorist</th>
<th>Perfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>ažuf</td>
<td>ažuf</td>
</tr>
</tbody>
</table>

There is one verb beginning with an a which does not change in the Perfective.

7.5.2.7. Medial vowel change

Medial vowel change means a change in any position that is neither initial nor final. Verbs that have medial vowel change can be divided in two types; those that change i > a, and
those that change $u > a \sim u$. There is one exceptional case which has $a \sim u > a$. Many of the verbs which have a vowel alternation are integrated Arabic hollow (\textit{cvc}) verbs. In Maghribian Arabic, hollow verbs which have an $u$ or $i$ in the Imperfective have an $a$ in the third person of the Perfective (singular and plural) (cf. Marçais 1977: 46). There is a third (minor) type which has $a$ in both aspects. Although in Arabic the vowel $a$ only appears in the third person of the Perfective with these type of verbs, in Berber, $a$ is found throughout the complete Perfective paradigm while the Aorist has $i$.

\textbf{cic verbs}

All verbs of this type are borrowed Arabic hollow verbs. The verbs change $i$ in the Aorist to $a$ in the Perfective as in the following example:

\begin{tabular}{lcl}
\textbf{fiq} & 'wake up' & \\
\hline
\textbf{Aorist} & \textbf{Perfective} & \\
1:SG & \textit{fiq-ax} & \textit{faq-ax} \quad 'I woke up' \\
2:SG & \textit{t-fiq-et} & \textit{t-faq-et} \quad 'You woke up' \\
3:M:SG & \textit{i-fiq} & \textit{i-faq} \quad 'He woke up' \\
3:F:SG & \textit{t-fiq} & \textit{t-faq} \quad 'She woke up' \\
1:PL & \textit{n-fiq} & \textit{n-faq} \quad 'We woke up' \\
2:PL & \textit{t-fiq-em} & \textit{t-faq-em} \quad 'You woke up' \\
3:PL & \textit{fiq-en} & \textit{faq-en} \quad 'They woke up'
\end{tabular}

Other verbs of this type are:

\begin{tabular}{ll}
\textbf{Aorist} & \textbf{Perfective} \\
\hline
\textit{rib} & \textit{rab} & \quad 'destroy' \\
\textit{eiš} & \textit{eas} & \quad 'live' \\
\textit{žif} & \textit{žaf} & \quad 'choke' \\
\textit{miḥ} & \textit{maḥ} & \quad 'empty water' \\
\textit{sīs} & \textit{sas} & \quad 'boil'
\end{tabular}
cicc / ccic verbs

Two verbs have i > a between the first and second consonant. The verb sisen has two possible variants of the Perfective which are in free variation. Both verbs are of Berber origin.

<table>
<thead>
<tr>
<th>Aorist</th>
<th>Perfective</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>siwel</td>
<td>sawel</td>
<td>'speak or talk'</td>
</tr>
<tr>
<td>sisen</td>
<td>sisen ~ sasen</td>
<td>'dip bread into gravy'</td>
</tr>
</tbody>
</table>

One verb in our corpus has optional i > a vowel change. There is free variation in the Perfective between the i and the a variant.

<table>
<thead>
<tr>
<th>Aorist</th>
<th>Perfective</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>zwir</td>
<td>zwir ~ zwar</td>
<td>'go first'</td>
</tr>
</tbody>
</table>

All other verbs of this type do not have vowel change, for example:

<table>
<thead>
<tr>
<th>Aorist</th>
<th>Perfective</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>wsir</td>
<td>wsir</td>
<td>'be/become old'</td>
</tr>
</tbody>
</table>

cuc verbs

Cuc verbs, most of which are borrowed Arabic hollow verbs, all have u > a ~ u alternation. The vowel changes are not restricted to the third person (singular and plural) but appear throughout the whole paradigm, as illustrated in the following paradigm.

<table>
<thead>
<tr>
<th></th>
<th>Aorist</th>
<th>Perfective</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:SG</td>
<td>eum-ax</td>
<td>eam-ax ~ eum-ax</td>
<td>'I swam'</td>
</tr>
<tr>
<td>2:SG</td>
<td>t-cum-et</td>
<td>t-cam-et ~ t-cum-et</td>
<td>'You swam'</td>
</tr>
<tr>
<td>3:M:SG</td>
<td>i-cum</td>
<td>i-cam ~ i-cum</td>
<td>'He swam'</td>
</tr>
<tr>
<td>3:F:SG</td>
<td>t-cum</td>
<td>t-cam ~ t-cum</td>
<td>'She swam'</td>
</tr>
<tr>
<td>1:PL</td>
<td>n-cum</td>
<td>n-cam ~ n-cum</td>
<td>'We swam'</td>
</tr>
<tr>
<td>2:PL</td>
<td>t-cum-em</td>
<td>t-cam-em ~ t-cum-em</td>
<td>'You swam'</td>
</tr>
<tr>
<td>3:PL</td>
<td>eum-en</td>
<td>eam-en ~ eum-en</td>
<td>'They swam'</td>
</tr>
</tbody>
</table>
Other verbs of this type are:

<table>
<thead>
<tr>
<th>Aorist</th>
<th>Perfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>ṣum</td>
<td>ṣam ~ ṣum</td>
</tr>
<tr>
<td>ẓuṛ</td>
<td>ẓaṛ ~ ẓuṛ</td>
</tr>
<tr>
<td>bus</td>
<td>bas ~ bus</td>
</tr>
<tr>
<td>šuš</td>
<td>šaš ~ šuš</td>
</tr>
</tbody>
</table>

The following verbs of different types change u in the Aorist to a or a ~ u in the Perfective.

<table>
<thead>
<tr>
<th>Aorist</th>
<th>Perfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>lluẓ</td>
<td>llaz ~ lluẓ</td>
</tr>
</tbody>
</table>

There are two verbs with the same structure which have free variation of a ~ u in the Aorist while a is used in the Perfective.

<table>
<thead>
<tr>
<th>Aorist</th>
<th>Perfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>ẓẓall ~ ẓẓull</td>
<td>ẓẓall</td>
</tr>
<tr>
<td>ggall ~ ggull</td>
<td>ggall</td>
</tr>
</tbody>
</table>

Note the following verbs which have the same structure as ẓẓall ~ ẓẓull, but do not show a vowel change. The Aorist and the Perfective remain the same.

<table>
<thead>
<tr>
<th>Aorist</th>
<th>Perfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>mmuṭ</td>
<td>mmuṭ</td>
</tr>
<tr>
<td>qquṛ</td>
<td>qquṛ</td>
</tr>
</tbody>
</table>

One verb of this type does not allow for free variation of a ~ u form in the Perfective, but has only a. It is originally not Arabic (Kossmann, 2013:124), but occurs as a Berber loan in local Arabic. In the local Arabic dialect the verb does not have vowel change, but has a constant u, different from the Ghomara Berber form.

The following verbs of different types change u in the Aorist to a or a ~ u in the Perfective.

<table>
<thead>
<tr>
<th>Aorist</th>
<th>Perfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>šuṭ</td>
<td>šaṭ</td>
</tr>
</tbody>
</table>

There are two verbs with the same structure which have free variation of a ~ u in the Aorist while a is used in the Perfective.

<table>
<thead>
<tr>
<th>Aorist</th>
<th>Perfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>ẓẓall ~ ẓẓull</td>
<td>ẓẓall</td>
</tr>
<tr>
<td>ggall ~ ggull</td>
<td>ggall</td>
</tr>
</tbody>
</table>

Note the following verbs which have the same structure as ẓẓall ~ ẓẓull, but do not show a vowel change. The Aorist and the Perfective remain the same.

<table>
<thead>
<tr>
<th>Aorist</th>
<th>Perfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>mmuṭ</td>
<td>mmuṭ</td>
</tr>
<tr>
<td>qquṛ</td>
<td>qquṛ</td>
</tr>
</tbody>
</table>

---

67 This form does not have labialisation (see II.4. on labialisation).
One verb in our corpus has $u \sim \emptyset$ in the Aorist and in the Perfective.

<table>
<thead>
<tr>
<th>Aorist</th>
<th>Perfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>šumm ~ šemm</td>
<td>šumm ~ šemm</td>
</tr>
</tbody>
</table>

### 7.5.2.8. Final vowel change

Verbs that show final vowel change have $u$ or $i$ in the Aorist and $a$ in the Perfective. There are a number of structures that have final vowel alternation: ccu, Cu, cCi, caci, cci, as well as a number of exceptional cases. The final vowel does not change according to person, for example:

<table>
<thead>
<tr>
<th>šhu ‘get better, heal’</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Aorist</strong></td>
</tr>
<tr>
<td>1:SG</td>
</tr>
<tr>
<td>2:SG</td>
</tr>
<tr>
<td>3:M:SG</td>
</tr>
<tr>
<td>3:F:SG</td>
</tr>
<tr>
<td>1:PL</td>
</tr>
<tr>
<td>2:PL</td>
</tr>
<tr>
<td>3:PL</td>
</tr>
</tbody>
</table>

### ccu verbs

This verb structure has final vowel $u$ in the Aorist that changes to $a$ in the Perfective.

<table>
<thead>
<tr>
<th>Aorist</th>
<th>Perfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>rku</td>
<td>rka</td>
</tr>
<tr>
<td>bnu ~ bn $u$</td>
<td>bn $a$</td>
</tr>
<tr>
<td>šhu</td>
<td>šha</td>
</tr>
<tr>
<td>ḫmu</td>
<td>ḫma</td>
</tr>
<tr>
<td>rnu</td>
<td>rna</td>
</tr>
<tr>
<td>bṭu</td>
<td>bṭa</td>
</tr>
<tr>
<td>ḣdu</td>
<td>ḣda</td>
</tr>
</tbody>
</table>

### Cu verbs

A number of verbs beginning with an initial geminate change final vowel $u$ in the Aorist to $a$ in the Perfective.
Aorist | Perfective | ‘plant’
---|---|---
ẓẓu | ẓẓa | ‘walk, go’

Not all verbs of this type participate in this vowel change. The following verbs show no formal difference between Aorist and Perfective:

Aorist | Perfective | ‘dry up’
---|---|---
kku | kku | ‘dry up’
ttu | ttu | ‘forget’

cCi verbs
A considerable number of verbs have final vowel change i > a. A frequently occurring structure is cCi (stem II of defective Arabic verbs). The changed vowels are stable throughout the paradigm, for example:

<table>
<thead>
<tr>
<th>Aorist</th>
<th>Perfective</th>
<th>‘ascend, go up’</th>
</tr>
</thead>
<tbody>
<tr>
<td>ɛelli</td>
<td>ɛel-x</td>
<td>‘I went up’</td>
</tr>
<tr>
<td>1:SG</td>
<td>ɛellia-x</td>
<td>‘I went up’</td>
</tr>
<tr>
<td>2:SG</td>
<td>t-ɛellia-t</td>
<td>‘You went up’</td>
</tr>
<tr>
<td>3:SG</td>
<td>i-ɛella</td>
<td>‘He went up’</td>
</tr>
<tr>
<td>3:F:SG</td>
<td>t-ɛella</td>
<td>‘She went up’</td>
</tr>
<tr>
<td>1:PL</td>
<td>n-ɛelli</td>
<td>‘We went up’</td>
</tr>
<tr>
<td>2:PL</td>
<td>t-ɛellia-m</td>
<td>‘You went up’</td>
</tr>
<tr>
<td>3:PL</td>
<td>ɛellia-n</td>
<td>‘They went up’</td>
</tr>
</tbody>
</table>

Other verbs of this type are:

Aorist | Perfective | ‘have sex’
---|---|---
ḥewwi | ḥewwa |

Aorist | Perfective | ‘rise’
---|---|---
ɛelli | ɛella |

Aorist | Perfective | ‘run’
---|---|---
žerri | žerra |

Aorist | Perfective | ‘finish’
---|---|---
feḍḍi | feḍḍa |

Aorist | Perfective | ‘sharpen’
---|---|---
mẽiddi | mẽidda |

Aorist | Perfective | ‘make blunt’
---|---|---
ḥeffi | ḥeffa |

Aorist | Perfective | ‘clean’
---|---|---
neqqi | neqqa |

Aorist | Perfective | ‘rub in with henna’
---|---|---
ḥenni | ḥenna |
The following verb of the type cCi has vowel change i > i ~ a. The Perfective has two forms which are in free variation.

<table>
<thead>
<tr>
<th>Aorist</th>
<th>Perfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>tekki</td>
<td>tekki ~ tekka</td>
</tr>
</tbody>
</table>

A number of verbs which have underlying ey > i in final position, do not have vowel change, for instance:

<table>
<thead>
<tr>
<th>Aorist</th>
<th>Perfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>denni</td>
<td>denni</td>
</tr>
<tr>
<td>lewwi</td>
<td>lewwi</td>
</tr>
</tbody>
</table>

cci verbs
The following infrequent structures show the change i > a of the final vowel. One verb has free variation of i ~ a in the Perfective.

<table>
<thead>
<tr>
<th>Aorist</th>
<th>Perfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>qli</td>
<td>qla</td>
</tr>
<tr>
<td>zri</td>
<td>zra</td>
</tr>
<tr>
<td>ḏri</td>
<td>ḏra ~ ḏra</td>
</tr>
</tbody>
</table>

Other cci verbs do not participate in these vowel changes, e.g.

<table>
<thead>
<tr>
<th>Aorist</th>
<th>Perfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>mṭi</td>
<td>mṭi</td>
</tr>
<tr>
<td>ngi</td>
<td>ngi</td>
</tr>
<tr>
<td>yli</td>
<td>yli</td>
</tr>
</tbody>
</table>

The following verb of the type cci has vowel change i > i ~ a. The Perfective forms show free variation of these two forms.

<table>
<thead>
<tr>
<th>Aorist</th>
<th>Perfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>xwi</td>
<td>xwi ~ xwa</td>
</tr>
</tbody>
</table>

caci verbs
A number of verbs which have structure caci change the final i to a in the Perfective.
### 7.5.2.9. Exceptional cases

The following verb shows a mixture of forms which includes optional final vowel change from i in the Aorist to a in the Perfective.

<table>
<thead>
<tr>
<th>Aorist</th>
<th>Perfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>laqi</td>
<td>laqa</td>
</tr>
<tr>
<td>wali</td>
<td>wala</td>
</tr>
<tr>
<td>ẓali</td>
<td>ẓala</td>
</tr>
<tr>
<td>ḥaḍi</td>
<td>ḥaḍa</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Aorist</th>
<th>Perfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>uḵi</td>
<td>uḵa ~ aḵi</td>
</tr>
</tbody>
</table>

One verb, ending in a vowel, adds vowel i to the Aorist to form the Perfective. Underlying w becomes u in final position.

<table>
<thead>
<tr>
<th>Aorist</th>
<th>Perfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>ṭṭu</td>
<td>ṭṭwi</td>
</tr>
</tbody>
</table>

One verb has the vowel change i in the Aorist to a in the Perfective.

<table>
<thead>
<tr>
<th>Aorist</th>
<th>Perfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>ṣeqṣi</td>
<td>ṣeqṣa</td>
</tr>
</tbody>
</table>

### 7.5.2.10. Defective verbs

There are two defective verbs in our corpus which have the same meaning: uḡem and aḥu ‘give deserved punishment’. The verb uḡem is obligatorily combined with the indirect object pronoun, for example:

<table>
<thead>
<tr>
<th>Perfective ‘give deserved punishment’</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:SG uḡm-ax as</td>
</tr>
<tr>
<td>2:SG t-uḡm-et as</td>
</tr>
<tr>
<td>3:M:SG y-uḡem as</td>
</tr>
<tr>
<td>3:F:SG t-uḡem as</td>
</tr>
<tr>
<td>1:PL n-uḡem as</td>
</tr>
<tr>
<td>2:PL t-uḡem-em as</td>
</tr>
<tr>
<td>3:PL uḡm-en as</td>
</tr>
</tbody>
</table>

163
The other defective verb which has the same meaning is an Imperative-only verb. It can only be used with the preposition g ‘in’.

(9)  
\[ \begin{array}{ll}
\text{ahu} & \text{ga-s} \\
\text{give.deserved.punishment:IMP} & \text{in-3S} \\
\end{array} \]

‘Give him/her the deserved punishment.’

There are two verbs of the Cc type which only have an Aorist and a Perfective form. They do not have an Imperfective form. They do not have labialised consonants.

<table>
<thead>
<tr>
<th>Aorist</th>
<th>Perfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>ssen</td>
<td>ssen</td>
</tr>
<tr>
<td>ffer</td>
<td>ffer</td>
</tr>
</tbody>
</table>

‘know’  ‘owe’

7.6. The Imperfective

While only a small number of Perfectives differ formally from the Aorist, most Imperfective stems are formally different from the Aorist. The Imperfective is generally formed on the basis of the Aorist by one of the following procedures:

(1) Consonant gemination (and exceptionally vowel insertion). Imperfective formation by gemination involves two possibilities. One group of verbs geminates the first consonant, the other group geminates the second consonant of the Aorist. Consonants in base-final position are rarely geminated (the verb neɣ ~ nuɣ ‘kill’ combines gemination with the addition of a final vowel a). In some exceptional cases gemination is accompanied by vowel insertion. Gemination can result either in a consonant which is only distinguished by length from its short counterpart or in a geminate consonant with a different manner and/or place of articulation (cf. II.1.9. phonology). Some examples of verbs which have consonant gemination in the Imperfective are:

<table>
<thead>
<tr>
<th>Aorist</th>
<th>Imperfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>zwir</td>
<td>zuggir</td>
</tr>
<tr>
<td>knes</td>
<td>kknes</td>
</tr>
<tr>
<td>ffred</td>
<td>fffred</td>
</tr>
<tr>
<td>rfes</td>
<td>reffes</td>
</tr>
<tr>
<td>dri</td>
<td>ddray</td>
</tr>
</tbody>
</table>

‘precede’ ‘argue’ ‘graze’ ‘knead’ ‘pass’

68 All aspectual stems of these verbs have the same form. Instead of the Berber-morphology verb ffer ‘owe’, Arabic-morphology verb sal ‘owe’ is used as well.
(2) Prefixation of tt ~ t, sometimes combined with vowel insertion or change. Most verb types form the Imperfective by prefixing tt ~ t. Many forms combine prefixation with vowel insertion. The distribution of the allomorphs tt ~ t is to some extent unpredictable. When immediately followed by a vowel or by a consonant plus a vowel, both tt and t are possible, depending on the verb, for example:

<table>
<thead>
<tr>
<th>Aorist</th>
<th>Imperfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>qqur</td>
<td>ttyar</td>
</tr>
<tr>
<td>qqim</td>
<td>ttyim ~ ttyima</td>
</tr>
<tr>
<td>ggull</td>
<td>ttgalla</td>
</tr>
<tr>
<td>kkar</td>
<td>ttkar</td>
</tr>
</tbody>
</table>

When followed by schwa and two consonants, the prefix is always tt. When followed by schwa and a geminate, it is always t, e.g.

ttehtiž  ‘want’  tettes  ‘sleep’

When immediately followed by a consonant and schwa the prefix is always t, except for cc verbs which always have tt, e.g.

tlebbaq  ‘become fat’  ttreq  ‘break’

The geminate consonant in the verb types Cc, Cvc and some irregular types degeminates when the tt ~ t is prefixed, for example:

(3) A combination of these procedures and deletion of a consonant

There is a group of verbs of the structures ccc, ccu and cc that combine gemination of the second base consonant with tt ~ t prefixation and substitution of the first consonant of the base by a. These verbs will be treated as a separate category below.

---

69 It should be noted that this is the only example of ḏ > dd correspondence in our corpus. There is no ṭ > tt correspondence. One possible candidate with ṭ > dd correspondence would be Aorist iddu > Imperfective ititu - ititu. As this is the only verb that shows this correspondence it is better considered an exception.
(4) Irregular cases
There is a minor category of verbs that form the Imperfective in an irregular way. Many of these verbs have $tt \sim t$ prefixation. They have vowel change, consonant change, a combination of both, or suppletion.

7.6.1. Gemination
Verbs that have the structure $ccu$ and $cci$ (except for one $cci$ verb) geminate the second consonant. For the much larger group of $ccc$ verbs, gemination works differently. Part of these verbs have gemination of the first consonant in the Imperfective, while others have gemination of the second consonant. Most $ccc$ verbs (though not all) have a sonorant in first or second consonant position. There is a correlation between the choice of the geminated consonant and the presence of a sonorant ($l$, $m$, $n$, $r$, $r$). When the sonorant is in initial position, it is always the second consonant that is geminated. When the sonorant is in second position, mostly the first consonant is geminated (often combined with insertion of $u$ before the final consonant). The latter distribution is a tendency and by no means a strict rule, as shown by pairs such as $xleq > xelleq$ ‘be born’ as opposed to $xneq > xxneq$ ‘smother (somebody)’ or $\text{kmeṭ} > \text{kemmeṭ}$ ‘burn’ as opposed to $\text{knes} > \text{kknes}$ ‘argue’.  

7.6.1.1. $ccc$ verbs with gemination of the first consonant and vowel insertion
The following overview provides examples of $ccc$ verbs that geminate the first consonant:

<table>
<thead>
<tr>
<th>Aorist</th>
<th>Imperfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>$dłeḡ$</td>
<td>$ddłeḡ$ ‘rub’</td>
</tr>
<tr>
<td>$xneq$</td>
<td>$xxneq$ ‘smother’ (person)</td>
</tr>
<tr>
<td>$\text{knes}$</td>
<td>$\text{kknes}$ ‘fight’</td>
</tr>
<tr>
<td>$krez$</td>
<td>$kkrez$ ‘plough’</td>
</tr>
<tr>
<td>$fɾēḏ$</td>
<td>$ffɾēḏ$ ‘graze’</td>
</tr>
</tbody>
</table>

The $ccv$ verbs which have initial consonant gemination and another irregular change are:

<table>
<thead>
<tr>
<th>Aorist</th>
<th>Imperfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>$qla$</td>
<td>$qqli$ ‘bake’</td>
</tr>
<tr>
<td>$dri$</td>
<td>$ddray$ ‘pass’</td>
</tr>
</tbody>
</table>

A majority of verbs of this type also add $u$ or $a$ before the final consonant.

---

70 For theoretical explanations of similar facts in Tashelhiyt see Dell & Elmedlaoui (2002) and Lahrouchi (2010).
<table>
<thead>
<tr>
<th>Aorist</th>
<th>Imperfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>ccc</td>
<td>Ccuc</td>
</tr>
<tr>
<td>qleḇ</td>
<td>qqluḇ</td>
</tr>
<tr>
<td>sleṯ</td>
<td>ssluṯ</td>
</tr>
<tr>
<td>freq</td>
<td>ffṛuq</td>
</tr>
<tr>
<td>yleq</td>
<td>yyluq</td>
</tr>
<tr>
<td>slex</td>
<td>sslux</td>
</tr>
<tr>
<td>ḥreḥ</td>
<td>ḥṛuḥ</td>
</tr>
<tr>
<td>qṣem</td>
<td>qqṣum</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ccc</th>
<th>Ccac</th>
</tr>
</thead>
<tbody>
<tr>
<td>sker</td>
<td>sskar</td>
</tr>
<tr>
<td>šceļ</td>
<td>ššceal</td>
</tr>
</tbody>
</table>

Some verbs of this type have two possible Imperfective forms, one with and one without vowel insertion, which are in free variation:

<table>
<thead>
<tr>
<th>Aorist</th>
<th>Imperfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>ccc</td>
<td>Ccuc ~ Ccuc</td>
</tr>
<tr>
<td>sbeɣ</td>
<td>ssbeɣ ~ ssbuɣ</td>
</tr>
<tr>
<td>ṭleq</td>
<td>ṭṭleq ~ ṭṭluq</td>
</tr>
<tr>
<td>qṛet</td>
<td>qqṛet ~ qqṛuṭ</td>
</tr>
<tr>
<td>sref</td>
<td>ssref ~ ssruṭ</td>
</tr>
<tr>
<td>ḥseḇ</td>
<td>ḥḥseḇ ~ ḥḥsuḇ</td>
</tr>
<tr>
<td>ḥfeṛ</td>
<td>ḥeffeṛ ~ ḥḥfuṛ</td>
</tr>
</tbody>
</table>

The following verb of the ccc type has three possible Imperfective forms which are in free variation (see above)\(^{71}\). One of the forms is identical to the Aorist:

<table>
<thead>
<tr>
<th>Aorist</th>
<th>Imperfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>yems</td>
<td>qqems ~ yemmes ~ yems</td>
</tr>
</tbody>
</table>

**cc verbs**

cc verbs have numerous different formations for the Imperfective. A number of verbs have gemination of the initial consonant and insertion of \(a\):

---

\(^{71}\) This verb is not very well known by many people, and the multiplicity of Imperfective forms may be due to uncertainty on behalf of the informants. This verb is claimed to be used especially by old generations. Younger people use the Arabic borrowing \(ɣeṭṭi\) ‘cover’ instead.
### 7.6.1.2. Verbs with gemination of the second consonant

#### ccc verbs

<table>
<thead>
<tr>
<th>Aorist</th>
<th>Imperfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>ccc</td>
<td>cCc</td>
</tr>
<tr>
<td>xleq</td>
<td>xelleq</td>
</tr>
<tr>
<td>mṭel</td>
<td>meṭṭel</td>
</tr>
<tr>
<td>hleḵ</td>
<td>helleḵ</td>
</tr>
<tr>
<td>rфеs</td>
<td>реффес</td>
</tr>
<tr>
<td>mger</td>
<td>megger</td>
</tr>
<tr>
<td>fṛeɛ</td>
<td>фɛréɛе</td>
</tr>
<tr>
<td>lseq</td>
<td>lesseq</td>
</tr>
<tr>
<td>mleḵ</td>
<td>mellелк</td>
</tr>
<tr>
<td>ršeq</td>
<td>reššеq</td>
</tr>
<tr>
<td>lḥes</td>
<td>leḥhes</td>
</tr>
<tr>
<td>rwel</td>
<td>регела (/regwel/)</td>
</tr>
<tr>
<td>kmel</td>
<td>kemmel</td>
</tr>
<tr>
<td>lkem ~ lkum (/lkem/)</td>
<td>lekkem</td>
</tr>
<tr>
<td>nğer</td>
<td>neģer</td>
</tr>
<tr>
<td>sket ~ skuṭ (/skwet/)</td>
<td>sekkeṭ</td>
</tr>
</tbody>
</table>

In some cases when ƙ is the first consonant of the verb in the Aorist and the Perfective, in the Imperfective a non-geminated stop ƙ is found, for example:

<table>
<thead>
<tr>
<th>Aorist</th>
<th>Imperfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>ƙmeṭ</td>
<td>kemmeṭ</td>
</tr>
<tr>
<td>ƙšem</td>
<td>kečem</td>
</tr>
<tr>
<td>ƙmel</td>
<td>kemmel</td>
</tr>
</tbody>
</table>
ccv verbs
Most ccu verbs geminate the second consonant to form the Imperfective. There exists another type of Imperfective formation of this type of verb.

<table>
<thead>
<tr>
<th>Aorist</th>
<th>Imperfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>ccu</td>
<td>cCu</td>
</tr>
<tr>
<td>rku</td>
<td>rekku</td>
</tr>
<tr>
<td>ḫnu</td>
<td>ḫennu</td>
</tr>
<tr>
<td>shu</td>
<td>sehḥu</td>
</tr>
<tr>
<td>ḫmu</td>
<td>ḫemmu</td>
</tr>
<tr>
<td>rnu</td>
<td>rennu</td>
</tr>
</tbody>
</table>

Most cci verbs geminate the second consonant.

<table>
<thead>
<tr>
<th>Aorist</th>
<th>Imperfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>cci</td>
<td>cCi</td>
</tr>
<tr>
<td>yli</td>
<td>yelli</td>
</tr>
<tr>
<td>zri</td>
<td>zerri</td>
</tr>
<tr>
<td>xwi</td>
<td>xewwi</td>
</tr>
<tr>
<td>mṭi</td>
<td>meṭṭi</td>
</tr>
<tr>
<td>ngi</td>
<td>neggi</td>
</tr>
</tbody>
</table>

cf verbs
Some cc verbs geminate the second consonant and some verbs optionally add a in the Imperfective. Two verbs have Imperfectives that are in free variation with forms that prefix tt.

<table>
<thead>
<tr>
<th>Aorist</th>
<th>Imperfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>cc</td>
<td>cC(a)</td>
</tr>
<tr>
<td>ney ~ nuy (ney(^\text{\text{&quot;}}))</td>
<td>neqqa</td>
</tr>
<tr>
<td>kes</td>
<td>kess ~ kessa (~t̥ikes)</td>
</tr>
<tr>
<td>ruy    (rey(^\text{\text{&quot;}}))</td>
<td>reqq (~t\text{\text{&quot;}}ray)</td>
</tr>
</tbody>
</table>

The following verbs have free variation between two forms which involve either gemination of the second consonant or gemination of the first consonant and insertion of u before the final vowel.

\(^{72}\) This verb is not used any longer by young people even though many of them know it.
Aorist    Imperfective
ccc    cCc ~ ccuc
ḥfeṛ    ḥeffeṛ ~ ḥḥfuṛ     ‘dig’
ḥseḇ    ḥesseḇ ~ ḥḥsuḇ    ‘count’

7.6.2. tt ~ t Imperfectives
In the following part Imperfective formation by means of tt ~ t prefixation is discussed. Often tt ~ t prefixation is combined with vowel insertion or vowel change.

7.6.2.1. Verbs with initial vowel
All verb forms that have a base-initial vowel in the Aorist have tt ~ t prefixation in the Imperfective. Many forms have free variation between a and u, while some have variation between labialised and non-labialised forms in the Aorist. The vowel is always a in the Imperfective and there is no labialisation.

<table>
<thead>
<tr>
<th>Aorist</th>
<th>Imperfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>acc ~ ucc</td>
<td>ttacc</td>
</tr>
<tr>
<td>aḡel ~ uḡel</td>
<td>ttaḡel</td>
</tr>
<tr>
<td>~ aḡul (/aḡ̂el/)</td>
<td></td>
</tr>
<tr>
<td>aḵel ~ aḵul (/aḵ̂el/)</td>
<td>ttaḵel</td>
</tr>
<tr>
<td>aḵer ~ aḵur (/aḵ̂er/)</td>
<td>ttaḵer</td>
</tr>
<tr>
<td>amez ~ umez</td>
<td>ttamez</td>
</tr>
<tr>
<td>aḡer ~ uḡer</td>
<td>ttaḡer</td>
</tr>
<tr>
<td>amer ~ umer</td>
<td>ttamer</td>
</tr>
<tr>
<td>azel ~ uzel</td>
<td>ttazel</td>
</tr>
<tr>
<td>ayel ~ uyeł</td>
<td>ttayel</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Aorist</th>
<th>Imperfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>ac ~ uc</td>
<td>ttac</td>
</tr>
<tr>
<td>af ~ uf</td>
<td>ttaf</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Aorist</th>
<th>Imperfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>aca ~ ucu</td>
<td>ttaca</td>
</tr>
<tr>
<td>ara ~ ura</td>
<td>ttara</td>
</tr>
<tr>
<td>Aorist</td>
<td>Imperfective</td>
</tr>
<tr>
<td>--------</td>
<td>--------------</td>
</tr>
<tr>
<td>acu ~ ucu</td>
<td>ttacu</td>
</tr>
<tr>
<td>alu</td>
<td>ttalu</td>
</tr>
<tr>
<td>aru ~ uru</td>
<td>ttaru</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Aorist</th>
<th>Imperfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>aci ~ uci</td>
<td>ttaci</td>
</tr>
<tr>
<td>ani ~ uni</td>
<td>ttani</td>
</tr>
<tr>
<td>aği ~ wği</td>
<td>ttaki</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Aorist</th>
<th>Imperfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>acuc</td>
<td>tacuc</td>
</tr>
<tr>
<td>ažuf</td>
<td>ttažuf</td>
</tr>
</tbody>
</table>

The Imperfective of the following verb is formed by prefixing tt and inserting a before the final consonant. As the deitic clitic d / id can be in initial position the tt- prefix assimilates in one variant.

<table>
<thead>
<tr>
<th>Aorist</th>
<th>Imperfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>aḏem d ~ aḏum d,</td>
<td>ttɑḏɑm d ~ ddaḏam</td>
</tr>
<tr>
<td>daḏem ~ daḏum</td>
<td></td>
</tr>
</tbody>
</table>

cCc verbs

cCc verbs are very common in Ghomara Berber. Almost all verbs of this type are borrowings from Arabic (stem II verbs) that are integrated into the Berber morphological system. Most verbs of this type form the Imperfective by prefixing t- and adding the vowel a before the final consonant.

<table>
<thead>
<tr>
<th>Aorist</th>
<th>Imperfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>cCc</td>
<td>tcCac</td>
</tr>
<tr>
<td>kerrek</td>
<td>tkerrak</td>
</tr>
<tr>
<td>lebbeq</td>
<td>tlebbaq</td>
</tr>
<tr>
<td>žewwef</td>
<td>tžewwaf</td>
</tr>
<tr>
<td>neẓẓeẓ</td>
<td>tneẓẓaẓ</td>
</tr>
<tr>
<td>seyyel</td>
<td>tseyyal</td>
</tr>
<tr>
<td>remmeš</td>
<td>tremešaš</td>
</tr>
<tr>
<td>xebbet</td>
<td>txebbat</td>
</tr>
<tr>
<td>neqqez</td>
<td>tneqqaz</td>
</tr>
</tbody>
</table>
There are a number of cCc verbs that prefix t- and do not insert a.

<table>
<thead>
<tr>
<th>Aorist</th>
<th>Imperfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>cCc</td>
<td>tcCc</td>
</tr>
<tr>
<td>nessem</td>
<td>tnessem</td>
</tr>
<tr>
<td>eeššer</td>
<td>teesšer</td>
</tr>
<tr>
<td>eerrež</td>
<td>tseerrež</td>
</tr>
<tr>
<td>qeššer</td>
<td>tqeššer</td>
</tr>
<tr>
<td>serrem</td>
<td>tserrem</td>
</tr>
</tbody>
</table>

One verb of this type has an Imperfective with an irregular loss of the w. It is in free variation with a form that retains the w.

<table>
<thead>
<tr>
<th>Aorist</th>
<th>Imperfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>wessec</td>
<td>tesse ~ twesse</td>
</tr>
</tbody>
</table>

**cvc verbs**

Almost all verb types with structure cvc only prefix tt ~ t to form the Imperfective. The stem vowel remains the same as in the Aorist. The vowel can be i, u and in one case a, for example:

<table>
<thead>
<tr>
<th>Aorist</th>
<th>Imperfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>cvc</td>
<td>ttcvc</td>
</tr>
<tr>
<td>riḇ</td>
<td>ttriḇ</td>
</tr>
<tr>
<td>fiq</td>
<td>ttfiq</td>
</tr>
<tr>
<td>eiš</td>
<td>ttetiš</td>
</tr>
<tr>
<td>žif</td>
<td>ttžif</td>
</tr>
<tr>
<td>miḥ</td>
<td>ttmiḥ</td>
</tr>
<tr>
<td>ṣuṭ</td>
<td>tsuṭ</td>
</tr>
<tr>
<td>zur</td>
<td>tzuṛ</td>
</tr>
<tr>
<td>ēum</td>
<td>ttcem</td>
</tr>
</tbody>
</table>
There is one verb of this type that has an obligatory deictic clitic d / id.

\[ \begin{array}{ll}
\text{Aorist} & \text{Imperfective} \\
\text{faw} d & \text{tfaw} d \quad \text{‘be in the morning’}
\end{array} \]

Two verbs of this type form their Imperfectives in an irregular way:

\[ \begin{array}{ll}
\text{Aorist} & \text{Imperfective} \\
\text{sis} & \text{ssyas} \quad \text{‘boil’} \\
\text{ṣum} & \text{ttṣum} \quad \text{‘fast’}
\end{array} \]

cvcc verbs

\[ \begin{array}{ll}
\text{cvcc verbs can form the Imperfective in two ways: by prefixing t to the Aorist, or by prefixing t and copying the first vowel in the base. Some examples of the first type are:} \\
\text{Aorist} & \text{Imperfective} \\
\text{cvcc} & \text{tcvcc} \\
\text{sisen} & \text{tsisen} \quad \text{‘dip bread into gravy’} \\
\text{sahel} & \text{tsahel} \quad \text{‘make easy’}
\end{array} \]

The following verbs copy the first vowel to the position before the final consonant. The vowel is either a or u.

\[ \begin{array}{ll}
\text{Aorist} & \text{Imperfective} \\
\text{cvcc} & \text{tcacvc} \\
\text{cayen} & \text{tcayan} \quad \text{‘look for, search’} \\
\text{gaded} & \text{tgadad} \quad \text{‘flatten’} \\
\text{cærət} & \text{tcərət} \quad \text{‘memorise’} \\
\text{ḥawel} & \text{tḥawal} \quad \text{‘try’} \\
\text{susem} & \text{tsusum} \quad \text{‘listen’} \\
\text{ṣuşef} & \text{ṭuşuşuf} \quad \text{‘spit’}
\end{array} \]
There is one verb which has an irregular infixation of two a’s:

<table>
<thead>
<tr>
<th>Aorist</th>
<th>Imperfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>cicc</td>
<td>tcacac</td>
</tr>
<tr>
<td>siwel</td>
<td>tsawal</td>
</tr>
</tbody>
</table>

‘speak or talk’

**Verbs of the types caci and cCi**

Caci and cCi verbs combine tt ~ t prefixation with insertion of a before final i. The i becomes y. These verbs are borrowed (integrated) Arabic stem III verbs.

<table>
<thead>
<tr>
<th>Aorist</th>
<th>Imperfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>caci</td>
<td>tcacay</td>
</tr>
<tr>
<td>laqi</td>
<td>tlaqay</td>
</tr>
<tr>
<td>wali</td>
<td>twalay</td>
</tr>
<tr>
<td>žali</td>
<td>tžalay</td>
</tr>
</tbody>
</table>

‘let, make meet’

‘hit’

‘separate’

<table>
<thead>
<tr>
<th>cCi</th>
<th>tcCay</th>
</tr>
</thead>
<tbody>
<tr>
<td>ḥewwi</td>
<td>thewway</td>
</tr>
<tr>
<td>ɛellii</td>
<td>tɛellay</td>
</tr>
<tr>
<td>žerri</td>
<td>tžerray</td>
</tr>
<tr>
<td>feḍḍi</td>
<td>tfeddday</td>
</tr>
<tr>
<td>meḍ̱ḍ̱i</td>
<td>tmeḍ̱ḍ̱ay</td>
</tr>
<tr>
<td>lewwi</td>
<td>tlewway</td>
</tr>
<tr>
<td>yeṭṭi</td>
<td>tyetṭay</td>
</tr>
<tr>
<td>tekki</td>
<td>tekkay</td>
</tr>
</tbody>
</table>

‘have sex’

‘go up’

‘run’

‘finish’

‘sharpen’

‘spin, roll’

‘cover’

‘press’

In one verb, i becomes a in the Imperfective.

<table>
<thead>
<tr>
<th>Aorist</th>
<th>Imperfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>caci</td>
<td>tcaca</td>
</tr>
<tr>
<td>haḍi</td>
<td>thada</td>
</tr>
</tbody>
</table>

‘touch’

**Cc verbs**

Most verbs which have the structure Cc take the prefix t (there are some irregular formations, see 7.6.4.). A number of verbs have labialised consonants which is why the vowel u appears in the Aorist (cf. labialisation II.4.). There is one irregular verb which has this Imperfective (see below).
<table>
<thead>
<tr>
<th>Aorist</th>
<th>Imperfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cc</td>
<td>tcC</td>
</tr>
<tr>
<td>īṭṭeš</td>
<td>teṭṭeš</td>
</tr>
<tr>
<td>zẓeḡ ~ zẓeḡ (/zζeḡ“/)</td>
<td>teẓẓeḡ</td>
</tr>
<tr>
<td>ddez</td>
<td>teddez</td>
</tr>
<tr>
<td>dder</td>
<td>tedder</td>
</tr>
<tr>
<td>kkur (/kkʷer/)</td>
<td>tekker</td>
</tr>
<tr>
<td>qqul (/qqʷel/)</td>
<td>teqqel</td>
</tr>
<tr>
<td>ggzuz (/ggʷez/)</td>
<td>teggez</td>
</tr>
<tr>
<td>kkkus (/kkʷes/)</td>
<td>tekkes</td>
</tr>
<tr>
<td>qqun (/qqʷen/)</td>
<td>teqqen</td>
</tr>
<tr>
<td>ffuɣ (/ffeɣʷ/)</td>
<td>teffeɣ</td>
</tr>
</tbody>
</table>

### cC verbs

cC verbs prefix t and add a after the final consonant.

<table>
<thead>
<tr>
<th>Aorist</th>
<th>Imperfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>cC</td>
<td>tcCa</td>
</tr>
<tr>
<td>ēeṭṭ</td>
<td>teēṭṭa</td>
</tr>
<tr>
<td>kebb</td>
<td>tkebba</td>
</tr>
<tr>
<td>hezz</td>
<td>thezza</td>
</tr>
<tr>
<td>rešš</td>
<td>trešša</td>
</tr>
<tr>
<td>medd</td>
<td>tmmedda</td>
</tr>
<tr>
<td>dešš</td>
<td>ddešša</td>
</tr>
<tr>
<td>ṣeff</td>
<td>tṣeffa</td>
</tr>
</tbody>
</table>

In one cC verb the final consonant is degeminated in the Imperfective.

### cc verbs with tt- prefix

cc verbs with tt- prefix

In five verbs of the structure cc, the Imperfective is formed by means of prefixing tt. Two verbs have an additional possibility to form the Imperfective by other means.

<table>
<thead>
<tr>
<th>Aorist</th>
<th>Imperfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>cc</td>
<td>ttcc</td>
</tr>
<tr>
<td>res</td>
<td>ttres</td>
</tr>
</tbody>
</table>
7.6.2.2. Other verbs which take tt- ~ t-

The few verbs that take a tt prefix and do not share their stem structure with other verbs are presented here.

<table>
<thead>
<tr>
<th>Aorist</th>
<th>Imperfective</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>myi d</td>
<td>ttmyi d</td>
<td>‘grow (plants)’</td>
</tr>
<tr>
<td>ymuɾ</td>
<td>tteɣmuɾ</td>
<td>‘grow (generic)’</td>
</tr>
<tr>
<td>kkar</td>
<td>ttkar</td>
<td>‘be full’</td>
</tr>
<tr>
<td>ḥruɾu</td>
<td>tteḥruɾu</td>
<td>‘crawl’</td>
</tr>
<tr>
<td>ṭtu</td>
<td>tettu</td>
<td>‘forget’</td>
</tr>
<tr>
<td>ṭṭṭu</td>
<td>teḍḍa</td>
<td>‘plant’</td>
</tr>
</tbody>
</table>

Verbs with more than three consonants

Verbs with more than three consonants form their Imperfective by prefixing t-. In addition, most verbs insert a before the final consonant.

<table>
<thead>
<tr>
<th>Aorist</th>
<th>Imperfective</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>caccc</td>
<td>ttcaccc</td>
<td>‘squeal’</td>
</tr>
<tr>
<td>taylef</td>
<td>tyaylef</td>
<td>‘become angry’</td>
</tr>
<tr>
<td>qawqeš</td>
<td>tqawqeš</td>
<td>‘tickle’</td>
</tr>
<tr>
<td>caccc</td>
<td>ttcacca</td>
<td>‘squeal’</td>
</tr>
<tr>
<td>dawses</td>
<td>tdawsas</td>
<td>‘squeal’</td>
</tr>
<tr>
<td>tɛerkɛ</td>
<td>tɛerkal</td>
<td>‘limp’</td>
</tr>
<tr>
<td>selsel</td>
<td>tselsal</td>
<td>‘bake grain’</td>
</tr>
<tr>
<td>serweṯ</td>
<td>tserwaṯ</td>
<td>‘thresh’</td>
</tr>
</tbody>
</table>
Penčer tpenčar ‘stab’

Aorist Imperfective
cccc tcccc
zeezee tzeezee ‘tremble’
dergel ddergel ‘roll’
qerqer tqerqer ‘sulk’

7.6.3. Prefix tt ~ t, gemination and substitution of a labial consonant

A number of ccc, ccu and cc verbs combine three procedures of Imperfective formation. The following verbs, which all have an initial labial consonant (b, ḑ, f, m or w), form the Imperfective by prefixing tt ~ t, followed by an a which replaces the initial base consonant, and gemination of the second consonant73. There are two verbs of the ccc type which do not geminate the second consonant but instead add a final vowel a74.

Aorist Imperfective
ccc t(t)aCc
bzeḡ tazzeḡ ‘swell, be wet’
ftel tattel ‘spin, roll’
fsεx tassεx ‘untie’
fteḥ tatteḥ ‘open’
ḇzεḍ̱ taẓẓεḍ̱ ‘urinate’
bdεḍ̱ ttaddeḍ̱ ‘stand up, remain, stop’
ḇṭεr taṭṭεr ‘hurry up, hasten’

One verb of this type has two Imperfectives which are in free variation.

Aorist Imperfective
mseḥ tasseḥ ~ messeḥ ‘clean’

The following verb of the type cc prefixes tt- and f is replaced by a.

---

73 A similar type of verb is found in Tašelhiyt Berber as well (cf. Kossmann, 1999: 120-125 for a historical explanation). The difference with Tašelhiyt is that in Ghomara there is a tt ~ t prefix.

74 The verbs mseḥ, fteḥ and ḑṭεr are loanwords from Arabic which have been integrated to this native Imperfective formation.
Aorist    Imperfective
cc       ttac
fk       ttak    ‘give’

The following ccu verbs show the same procedure to form an Imperfective.

Aorist    Imperfective
ccu                              taCu ~ ttaCu
ḇṭu                 taṭṭu    ‘share’
ḇdu     ttaddu    ‘begin’

The following two verbs starting in we (with schwa that does not change position) form the Imperfective by prefixing tt, substituting we by a and suffixing another a after the root. These verbs do not geminate the second consonant.

Aorist    Imperfective
ccc                         ttacca
werg                ttarga    ‘dream’
wešk                 ttaška    ‘get lost’

7.6.4. Irregular verbs
A number of verbs form the Imperfective in an irregular way. There can be irregular vowels, irregular consonants, a combination of both and suppletion. Many verbs have a tt ~ t prefix.

7.6.4.1. Irregular vowels

7.6.4.1.1. Insertion of a
The following verbs insert an a in an irregular way. In most cases there is a tt ~ t prefix as well. Initial kk degeminate to k after the prefix tt.

Aorist    Imperfective
mṯen    ttamṯen    ‘ferment’
ǧ ~ wǧ              ttaǧ    ‘keep’
kkū                ttkaw    ‘dry up’
ǧun     tšawan    ‘be full’
ẓẓwiṯ     ẓẓayaṯ    ‘miss’
xṭaṛ                ttaxṭaṛ (~ttexṭaṛ)    ‘choose’
7.6.4.1.2. Insertion of i

The following verbs consist of a single geminate consonant in the Aorist (see below for other verbs of this type).

<table>
<thead>
<tr>
<th>Aorist</th>
<th>Imperfective</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>ḫtajḥ</td>
<td>tteḥtiż</td>
<td>‘want, love’</td>
</tr>
<tr>
<td>ḫtajḥ</td>
<td>tteḥtiż</td>
<td>‘be’</td>
</tr>
</tbody>
</table>

There is one irregular Imperfective in the corpus to which y is added.

<table>
<thead>
<tr>
<th>Aorist</th>
<th>Imperfective</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>faltaja</td>
<td>tfalṭay</td>
<td>‘make a mistake’</td>
</tr>
</tbody>
</table>

7.6.4.1.3. Irregular consonants

There is one verb that adds a d in the Imperfective.

<table>
<thead>
<tr>
<th>Aorist</th>
<th>Imperfective</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>ḡḡ</td>
<td>deḡḡ</td>
<td>‘do, make’</td>
</tr>
</tbody>
</table>

7.6.4.1.4. Irregular consonants and vowels

A number of verbs have both irregular consonants and vowels in the Imperfective. Some of them may be considered suppletive.

<table>
<thead>
<tr>
<th>Aorist</th>
<th>Imperfective</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>dher</td>
<td>ttituṭ ~ ttuṭu</td>
<td>‘appear’</td>
</tr>
<tr>
<td>dduu</td>
<td>ttuṭu</td>
<td>‘walk’</td>
</tr>
<tr>
<td>rri</td>
<td>rraz</td>
<td>‘return, plant’</td>
</tr>
<tr>
<td>mmuṭ</td>
<td>tmettaṭ</td>
<td>‘die’</td>
</tr>
<tr>
<td>qqūṭ</td>
<td>tṭuṛ</td>
<td>‘dry’</td>
</tr>
<tr>
<td>lluṭ</td>
<td>tlaẓ</td>
<td>‘be hungry’</td>
</tr>
<tr>
<td>ggull</td>
<td>tggalla</td>
<td>‘swear’</td>
</tr>
<tr>
<td>bbukk</td>
<td>tḥakka</td>
<td>‘explode’</td>
</tr>
<tr>
<td>mel</td>
<td>mnal</td>
<td>‘show’</td>
</tr>
<tr>
<td>wweṭ</td>
<td>kkaṭ ~ tkat</td>
<td>‘strike, hit, shoot’</td>
</tr>
<tr>
<td>su</td>
<td>sess</td>
<td>‘drink’</td>
</tr>
</tbody>
</table>

7.6.5. Suppletion

The following verbs have suppletive Imperfectives.
There is one verb which does not change its form in the Imperfective.

The following verb forms the Imperfective by prefixing tt and optionally adding a. Note that qq is degeminated after the tt prefix.

The verb nu ‘be cooked’ has a final u which is an underlying w (e.g. 3MS i-nwa ‘it is cooked’). This semi-vowel has a gg geminated counterpart.

7.7. The ss causative derivation

The causative is derived from a non-derived verb by means of the prefix ss ~ s. There are no other derivational affixes that can be applied to a Berber verb. Instead, derived forms, esp. for the passive, are expressed by suppletion with Arabic forms (cf. chapter III.8.3.1.). The number of verbs that can form a causative by means of the ss ~ s prefix is limited to about forty in our corpus, which are all presented here. Other verbs (Berber or Arabic-morphology class) form the causative by means of cCc verbs (cf. IV.3.2.1. verbal syntax on derivations). Some causative verbs do not have a non-derived counterpart. Because of their formal make-up they will be presented here anyway.

A number of Perfective and virtually all Imperfective forms have specific formations as compared to the non-derived bases. Different from non-derived verbs vowel apophony is the main formation type for the Perfective and Imperfective causative. Another characteristic of Imperfective formation of a causative verb is that in general the tt ~ t
prefix cannot combine with ss ~ s prefixation (except for four verbs, one of which has optional tt ~ t prefixation).

In this section we will first present some general phenomena which have to do with causative formation. Then we will present the formation of the Perfective, followed by the formation of the Imperfective. The Aorist is taken as the basis from which the other aspectual stems are derived. Perfective formation can be divided into verbs that add a before the suffix, verbs that change vowels u > a and i > a and verbs that have labialisation in the Aorist, which is lost in the Perfective. A number of verbs do not change in the Perfective. The Imperfective is mainly formed by vowel insertion. There is one verb that is probably onomatopoic in origin, which has the causative prefix.

<table>
<thead>
<tr>
<th>Aorist</th>
<th>Perfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>ss-kuḥ</td>
<td>ss-kuḥ۷۶</td>
</tr>
<tr>
<td></td>
<td>‘cough’</td>
</tr>
</tbody>
</table>

7.7.1. Some remarks about the prefix and the base

When the base has a š, the prefix optionally harmonises to šš. Harmonisation with z only occurs in one verb, which no longer has an underived counterpart. Other verbs with z in the base have the prefix ss-:

<table>
<thead>
<tr>
<th>Aorist</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>šš-ekšem ( ~ ss-ekšem)</td>
<td>‘make enter’</td>
</tr>
<tr>
<td>š-wešk</td>
<td>‘cause to get lost’</td>
</tr>
<tr>
<td>zz-enz ~ z-nez</td>
<td>‘sell’</td>
</tr>
</tbody>
</table>

Pharyngealisation spreads to the ss ~ s prefix (cf. II.1.11. phonology).

<table>
<thead>
<tr>
<th>Aorist</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ss-ehšel</td>
<td>[šš-ehšel] ‘drop’</td>
</tr>
<tr>
<td>ss-eymuʁ</td>
<td>[šš-eymuʁ] ‘make grow’</td>
</tr>
</tbody>
</table>

In the following cc and cecc verbs the causative prefix is not geminated:

<table>
<thead>
<tr>
<th>Aorist</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>s-nes</td>
<td>‘extinguish’</td>
</tr>
<tr>
<td>s-res</td>
<td>‘put down’</td>
</tr>
<tr>
<td>š-wešk</td>
<td>‘make disappear’</td>
</tr>
</tbody>
</table>

۷۶ The onomatopeia does not exist in the language. It does exist as a verb in local Arabic, kaḥ ~ ikuh ‘cough’.
Some verbs with an initial geminate insert a vowel between the prefix and the base form of the verb. The geminate is degeminated, for instance:

<table>
<thead>
<tr>
<th>non-derived Aorist</th>
<th>Aorist</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>ffuy</em> (/ffeɣ/) ‘go out’</td>
<td><em>ss-ufuy</em> /ss-ufey*/ ‘make go out, expel’</td>
</tr>
<tr>
<td><em>gguz</em> (/ffeɣ/) ‘descend’</td>
<td><em>ss-aguz</em> /ss-agez/ ‘lower’</td>
</tr>
</tbody>
</table>

Other geminate-initial verbs degeminate the initial consonant after *ss* (without insertion of a plain vowel), for example:

<table>
<thead>
<tr>
<th>non-derived Aorist</th>
<th>Aorist</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>ttru</em> ‘cry’</td>
<td><em>ss-etru</em> ‘make cry’</td>
</tr>
<tr>
<td><em>kku</em> ‘dry’</td>
<td><em>ss-ku</em> ‘make dry’</td>
</tr>
</tbody>
</table>

### 7.7.2. Perfective formation

A number of causative verbs formally distinguish the Aorist and the Perfective. Most of these verbs have either one or two base consonants and a full vowel which changes in the Perfective. Two verbs, one *cu* verb and one *cc* verb, add *a* between the base and the suffix in the Perfective. There are basically two vowel changes: *a* in the Aorist becomes *u* in the Perfective, or *i* in the Aorist becomes *a* in the Perfective. These vowels may change in base-initial, base-medial and base-final position. Verbs which have a three-consonantal stem do not change, except for some verbs which have a labialised consonant in the Aorist.

#### 7.7.2.1. Addition of *a* before suffix

The causatives of the verb *nu* ‘be ripe/cooked’ and *nes* ‘extinguish’ have a vowel *a* in the Perfective before a conjugational suffix. The Aorist of the verb *ss-nu* ‘be cooked/be ripe’ has a free variant with *a*. In the Perfective of the derived verb *ss-nes* ‘put out’ the *a* is optional. We have provided the full Aorist and Perfective paradigms below.

<table>
<thead>
<tr>
<th><em>ss-nu</em> ‘cook’</th>
<th><strong>Perfective</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Aorist</strong></td>
<td><strong>Perfective</strong></td>
</tr>
<tr>
<td>1:SG</td>
<td><em>ss-nu-x ~ ss-enwa-x</em></td>
</tr>
<tr>
<td>2:SG</td>
<td><em>te-ss-nu-t ~ te-ss-enwa-t</em></td>
</tr>
<tr>
<td>3:M:SG</td>
<td><em>i-ss-nu</em></td>
</tr>
<tr>
<td>3:F:SG</td>
<td><em>t-ess-nu</em></td>
</tr>
</tbody>
</table>

---

77 In other Berber dialects such as Aït Seghrouchen (Bentolila, 1981: 375), *ss-* derived verbs have no formal distinction between Aorist and Perfective. In Tašelhiyt such verbs do make a distinction which exists in underived verbs as well (cf. Aspinion, 1953: 263).
\[\text{Aorist} \quad \text{Perfective}\]

<table>
<thead>
<tr>
<th>Person</th>
<th>Aorist</th>
<th>Perfective</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:PL</td>
<td>n-ess-nu</td>
<td>n-ess-nu</td>
<td>‘We cooked’</td>
</tr>
<tr>
<td>2:PL</td>
<td>te-ss-num \sim te-ss-enwa-m</td>
<td>te-ss-enwa-m</td>
<td>‘You (P) cooked’</td>
</tr>
<tr>
<td>3:PL</td>
<td>ss-nu-n \sim ss-enwa-n</td>
<td>ss-enwa-n</td>
<td>‘They cooked’</td>
</tr>
</tbody>
</table>

**ss-nes**\(^7^8\) ‘extinguish, put out’

\begin{tabular}{ll}
\textbf{Aorist} & \textbf{Perfective} \\
1:SG & ssens-ax & sse-nsa-x & ‘I put out’ \\
2:SG & te-sse-ns-et & t-sse-nsa-t \sim t-sse-ns-et & ‘You put out’ \\
3:M:SG & i-s-nes \sim i-ss-ens & i-s-nes \sim i-ss-ens & ‘He put out’ \\
3:F:SG & te-s-nes \sim te-ss-ens & te-s-nes \sim t-ss-ens & ‘She put out’ \\
\end{tabular}

**1:SG**

| 1:SG | ssens-ax | sse-nsa-x | ‘I put out’ |
| 2:SG | te-sse-ns-et | t-sse-nsa-t \sim t-sse-ns-et | ‘You put out’ |
| 3:M:SG | i-s-nes \sim i-ss-ens | i-s-nes \sim i-ss-ens | ‘He put out’ |
| 3:F:SG | te-s-nes \sim te-ss-ens | te-s-nes \sim t-ss-ens | ‘She put out’ |

**7.7.2.2. Vowel change u > a**

The following verbs change an initial, medial or final vowel \(u\) in the Aorist to \(a\) in the Perfective. The \(u\) in initial position in the Aorist is copied to pre-final position if there is a schwa position (in the example in third person and first person plural). To illustrate this we show the Aorist conjugation of one verb \(ssuṭeṣ\) ‘make sleep’. A geminate is degeminated in the causative form. The verbs \(zzuɣur\) ‘drag’ and \(ssxumem \sim ssxumum\) ‘suck’ do not have a non-derived counterpart. The voicing of the prefix of \(zz-uyur\) is unexplained.

<table>
<thead>
<tr>
<th>Person</th>
<th>Aorist</th>
<th>Perfective</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:SG</td>
<td>ssuṭṣ-ax</td>
<td>ssaṭṣ-ax</td>
<td>‘I made sleep’</td>
</tr>
<tr>
<td>2:SG</td>
<td>te-ssuṭṣ-et</td>
<td>te-ssaṭṣ-et</td>
<td>‘You made sleep’</td>
</tr>
<tr>
<td>3:M:SG</td>
<td>i-ssuṭuş</td>
<td>i-ssaṭeṣ</td>
<td>‘He made sleep’</td>
</tr>
<tr>
<td>3:F:SG</td>
<td>te-ssuṭuş</td>
<td>te-ssaṭeṣ</td>
<td>‘She made sleep’</td>
</tr>
</tbody>
</table>

\begin{tabular}{ll}
\textbf{Aorist} & \textbf{Perfective} \\
1:PL | ne-ssuṭuş | ne-ssaṭeṣ & ‘We made sleep’ \\
2:PL | t-e-ssuṭṣ-em | t-e-ssaṭeṣ-em & ‘You made sleep’ \\
3:PL | ssuṭš-em | ssaṭš-en & ‘They made sleep’ \\
\end{tabular}

**Initial position**

<table>
<thead>
<tr>
<th>Aorist</th>
<th>Perfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>(tṭeṣ)</td>
<td>ss-uṭuş</td>
</tr>
</tbody>
</table>

\(^7^8\) The prefix can be simple or geminated.
In the two following verbs the \( u \) before the final consonant is probably the result of labialisation.

\[
\begin{array}{llll}
\text{ffuy} & \text{ss-ufuy} & \text{/ss-ufey/} & \text{ss-afey} \\
\text{---} & \text{zz-uyur} & \text{/zz-uyer/} & \text{zz-ayer}
\end{array}
\]

‘make go out, expel’

‘drag’

There are two verbs with the same vowel change \( u > a \sim u \). Neither of these verbs has a non-derived counterpart. Furthermore, both verbs have a \( t \)-prefix in the Imperfective.

<table>
<thead>
<tr>
<th>non-derived</th>
<th>Aorist</th>
<th>Perfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>---</td>
<td>( \text{susef} )</td>
<td>( \text{sasef} )</td>
</tr>
<tr>
<td>---</td>
<td>( \text{susem} )</td>
<td>( \text{sasem} \sim \text{susem} )</td>
</tr>
</tbody>
</table>

### Medial position

<table>
<thead>
<tr>
<th>non-derived</th>
<th>Aorist</th>
<th>Perfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>( \text{eum} )</td>
<td>( \text{ss-eum} )</td>
<td>( \text{ss-eam} )</td>
</tr>
<tr>
<td>( \text{bbukk} )</td>
<td>( \text{ss-bukk} )</td>
<td>( \text{ss-bakk} )</td>
</tr>
</tbody>
</table>

### Final position

<table>
<thead>
<tr>
<th>non-derived</th>
<th>Aorist</th>
<th>Perfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>( \text{hmu} )</td>
<td>( \text{ss-ehmu} )</td>
<td>( \text{ss-ehma} )</td>
</tr>
<tr>
<td>---</td>
<td>( \text{ss-endu} )</td>
<td>( \text{ss-enda} )</td>
</tr>
</tbody>
</table>

The Perfective of the verb \( \text{tte} \text{ttu} \) ‘cry’ has two forms which are in free variation, one with and one without a vowel change.

<table>
<thead>
<tr>
<th>non-derived</th>
<th>Aorist</th>
<th>Perfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>( \text{tte} \text{ttu} )</td>
<td>( \text{ss-etu} )</td>
<td>( \text{ss-eta} \sim \text{ss-etu} )</td>
</tr>
</tbody>
</table>
7.7.2.3. Vowel change i > a

A number of verbs change i > a in initial, medial and final position.

**Initial position**

There are two verbs which have stem-initial i in the Aorist, which changes to a in the Perfective. These verbs do not exist in a non-derived variant. The non-derived forms (and ss causative forms) of these verbs are well attested in a number of other Berber languages.

<table>
<thead>
<tr>
<th>non-derived</th>
<th>Aorist</th>
<th>Perfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>---</td>
<td>ss-ired</td>
<td>ss-ared</td>
</tr>
<tr>
<td>---</td>
<td>ss-ifef</td>
<td>ss-afef</td>
</tr>
</tbody>
</table>

There is one other verb which shows this pattern. This verb does not have an underived counterpart either.

<table>
<thead>
<tr>
<th>non-derived</th>
<th>Aorist</th>
<th>Perfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>---</td>
<td>ss-fi</td>
<td>ss-fa</td>
</tr>
</tbody>
</table>

**Medial position**

<table>
<thead>
<tr>
<th>non-derived</th>
<th>Aorist</th>
<th>Perfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>fiq</td>
<td>ss-fiq</td>
<td>ss-faq</td>
</tr>
</tbody>
</table>

**Final position**

<table>
<thead>
<tr>
<th>non-derived</th>
<th>Aorist</th>
<th>Perfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>ani ~ uni</td>
<td>ss-ani</td>
<td>ss-ana</td>
</tr>
<tr>
<td>myi</td>
<td>ss-emyi (d)</td>
<td>ss-emya (d)</td>
</tr>
<tr>
<td>yli</td>
<td>ss-eyli</td>
<td>ss-eyli</td>
</tr>
<tr>
<td>ɛelli</td>
<td>ss-ɛeli ~ ss-ɛlei</td>
<td>ss-ɛela ~ ss-ɛlea</td>
</tr>
</tbody>
</table>

The verb ss-edri ‘make pass’ has free variation i ~ a in the Perfective:

<table>
<thead>
<tr>
<th>non-derived</th>
<th>Aorist</th>
<th>Perfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>gdi</td>
<td>ss-gdi</td>
<td>ss-edri ~ ss-edra</td>
</tr>
</tbody>
</table>
There is one verb which has u in the Aorist and a ~ u in the Perfective.

<table>
<thead>
<tr>
<th>non-derived</th>
<th>Aorist</th>
<th>Perfective</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>ggall</td>
<td>s-gull</td>
<td>s-gall ~ s-gull[^79]</td>
<td>'make swear'</td>
</tr>
</tbody>
</table>

### 7.7.2.4. Labialisation

Some verbs have optional or obligatory labialised consonants in the Aorist but not in the Perfective. One such verb is the causative of ruɣ ~ reɣ (/reɣʷ/ ~ /reɣ/) ‘be lit’:

<table>
<thead>
<tr>
<th>non-derived</th>
<th>Aorist</th>
<th>Perfective</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>ruɣ ~ reɣ</td>
<td>ss-ruɣ ~ ss-reɣ</td>
<td>ss-reɣ</td>
<td>'light'</td>
</tr>
</tbody>
</table>

The labialised geminate consonant in gguz ‘descend’ is degeminated in the derived form and a vowel a is added in initial base position. In the Perfective there is no labialisation.

<table>
<thead>
<tr>
<th>non-derived</th>
<th>Aorist</th>
<th>Perfective</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>gguz (/ggwz)</td>
<td>ss-aguz (/ss-agwz/)</td>
<td>ss-agez</td>
<td>'let, make descend'</td>
</tr>
</tbody>
</table>

The following three-consonantal verbs optionally or obligatorily have labialised k or ꞏ in the Aorist. Note the degemination of kk and the addition of n in the causative form of kkur.

This derived form with n is known from a number of other Berber varieties (cf. Galand 2002 [1984]:105 for discussion of this verb).

<table>
<thead>
<tr>
<th>non-derived</th>
<th>Aorist</th>
<th>Perfective</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>lkum (/lkwem)</td>
<td>ss-elkem ~</td>
<td>ss-elkem</td>
<td>‘take, bring’</td>
</tr>
<tr>
<td></td>
<td>ss-elkum (ss-elkem)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>kkur (/kk'er/)</td>
<td>ss-enkur (ss-enk'er)</td>
<td>ss-enker</td>
<td>‘wake up, get up’</td>
</tr>
<tr>
<td>bzuḡ (/bzeḡ')</td>
<td>ss-ebbzeḡ</td>
<td>ss-ebbzeḡ</td>
<td>‘make wet’</td>
</tr>
</tbody>
</table>

### 7.7.2.5. Aorist = Perfective

All other derived causative verbs have the same stem forms for the Aorist and the Perfective. This is the case for the following verbs:

<table>
<thead>
<tr>
<th>non-derived</th>
<th>Aorist</th>
<th>Perfective</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>qqur</td>
<td>ss-qar ~ ss-yar</td>
<td>ss-qar ~ ss-yar</td>
<td>‘make dry’</td>
</tr>
<tr>
<td>faw</td>
<td>ss-faw (d)</td>
<td>ss-faw (d)</td>
<td>‘make become’</td>
</tr>
</tbody>
</table>

[^79]: An often used alternative is cC verb hellef ‘make swear’.
<table>
<thead>
<tr>
<th>Verb</th>
<th>Aorist</th>
<th>Perfective</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>ḫmeṭ</td>
<td>ss-ḫmeṭ</td>
<td>ss-ḫmeṭ</td>
<td>‘burn’</td>
</tr>
<tr>
<td>ḫšem</td>
<td>ḫš-ḫšem</td>
<td>ḫš-ḫšem</td>
<td>‘make enter, let in’</td>
</tr>
<tr>
<td>mlēḵ</td>
<td>ss-mlēḵ</td>
<td>ss-mlēḵ</td>
<td>‘let, make marry’</td>
</tr>
<tr>
<td>bdeḏ</td>
<td>ss-bdeḏ</td>
<td>ss-bdeḏ</td>
<td>‘let, make stand up’</td>
</tr>
<tr>
<td>nṭer</td>
<td>ss-nṭer</td>
<td>ss-nṭer</td>
<td>‘let, make fly’</td>
</tr>
<tr>
<td>ḥṣel</td>
<td>ss-ḥṣel</td>
<td>ss-ḥṣel</td>
<td>‘drop’</td>
</tr>
<tr>
<td>nṭeq</td>
<td>ss-nṭeq</td>
<td>ss-nṭeq</td>
<td>‘let, make fly’</td>
</tr>
<tr>
<td>hleḵ</td>
<td>ss-hleḵ</td>
<td>ss-hleḵ</td>
<td>‘make sick’</td>
</tr>
</tbody>
</table>

One verb has three free variants in the Perfective:

<table>
<thead>
<tr>
<th>non-deriv.</th>
<th>Aorist</th>
<th>Perfective</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>wešk</td>
<td>š-wešk</td>
<td>šš-wešk</td>
<td>‘let, make loose, let, make dissappear’</td>
</tr>
</tbody>
</table>

### 7.7.3. Imperfective formation

Imperfectives of causative verbs are formed by inserting a vowel before the final vowel or consonant of the Aorist base. Most verbs take a, while some verbs insert u or i. Furthermore, there are some exceptional cases where u or y are added to the end. The Imperfective prefix tt ~ t is disallowed in combination with ss ~ s causatives, except for four verbs, which take the prefix (one verb has both possibilities). We do consider these two exceptions to be causatives, because they both have corresponding non-derived bases. Finally, there are some Imperfectives that do not change their form. Gemination is not used to form the Imperfective. Below we will present the Imperfective formations, taking the Aorist as the basic form.
7.7.3.1. Insertion of a

The following structures insert vowel a before the final base vowel or consonant. There are a number of ccc verbs which insert a before the final consonant in the Imperfective. The verb ss-entef ‘wound’ does not have a non-derived form.

<table>
<thead>
<tr>
<th>non-derived</th>
<th>Aorist</th>
<th>Imperfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>ḳmeṭ</td>
<td>ss-ekmeṭ</td>
<td>ss-ekmaṭ</td>
</tr>
<tr>
<td>bzeich ~ bzuḡ</td>
<td>ss-ebzaḡ</td>
<td>ss-ebzaḡ</td>
</tr>
<tr>
<td>mleḵ</td>
<td>ss-emleḵ</td>
<td>ss-emlaḵ</td>
</tr>
<tr>
<td>bdeḏ</td>
<td>ss-ebdeḏ</td>
<td>ss-ebdaḏ</td>
</tr>
<tr>
<td>---</td>
<td>ss-entef</td>
<td>ss-entaf</td>
</tr>
<tr>
<td>ṇṭer</td>
<td>ss-entër</td>
<td>ss-entar</td>
</tr>
<tr>
<td>ṇtega</td>
<td>ss-entega</td>
<td>ss-entaḡ</td>
</tr>
<tr>
<td>hleḵ</td>
<td>ss-eḥleḵ</td>
<td>ss-eḥlaḵ</td>
</tr>
</tbody>
</table>

The following two ccc verbs loose their labialisation of k in the Imperfective:

<table>
<thead>
<tr>
<th>non-derived</th>
<th>Aorist</th>
<th>Imperfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>lkem ~</td>
<td>ss-elkem ~</td>
<td>ss-elkam</td>
</tr>
<tr>
<td>lkum (/lkʰem/)</td>
<td>ss-elkum (/ss-ekʰem/)</td>
<td></td>
</tr>
<tr>
<td>kkur (/kkʰer/)</td>
<td>ss-enkur</td>
<td>ss-enkar</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(/ss-enkʰer/)</td>
</tr>
</tbody>
</table>

There is one cc verb which inserts a:

<table>
<thead>
<tr>
<th>non-derived</th>
<th>Aorist</th>
<th>Imperfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>meḏ</td>
<td>ss-med</td>
<td>ss-maḏ</td>
</tr>
</tbody>
</table>

Two ccc verbs use the Imperfective prefix t-, in combination with the insertion of a. In the first verb, t- is obligatory, in the second it is optional[^80].

<table>
<thead>
<tr>
<th>non-derived</th>
<th>Aorist</th>
<th>Imperfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>ḵšem</td>
<td>šš-ekšem</td>
<td>t-š-ekšam</td>
</tr>
<tr>
<td>ḥṣel</td>
<td>ss-ehṣel</td>
<td>ss-ehṣal ~ t-s-ehṣal</td>
</tr>
</tbody>
</table>

[^80]: In many Berber languages the two prefixes ss ~ s and tt ~ t are mutually exclusive, (cf. for example Cadi, 1987 and Kossmann, 2002 for the history of the Imperfective).
In the following verb **u** in the Aorist is changed into **a** in the Imperfective and an **a** is added. The initial **bb** is degeminated.

<table>
<thead>
<tr>
<th>non-derived</th>
<th>Aorist</th>
<th>Imperfective</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>bbukk</strong></td>
<td><strong>ss-bukk</strong></td>
<td><strong>ss-bakka</strong></td>
</tr>
</tbody>
</table>

In case there is a final vowel, **u** becomes a glide **w** and **i** becomes a glide **y** (The final vowel is underlyingly a semi-vowel, cf. II.2.2.).

<table>
<thead>
<tr>
<th>non-derived</th>
<th>Aorist</th>
<th>Imperfective</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>kku</strong></td>
<td><strong>ss-ku</strong></td>
<td><strong>ss-kaw</strong></td>
</tr>
<tr>
<td><strong>nu</strong></td>
<td><strong>ss-nu</strong></td>
<td><strong>ss-naw</strong></td>
</tr>
<tr>
<td><strong>ni</strong></td>
<td><strong>ss-ani</strong></td>
<td><strong>ss-anay</strong></td>
</tr>
<tr>
<td>---</td>
<td><strong>ss-fi</strong></td>
<td><strong>ss-fay</strong></td>
</tr>
<tr>
<td><strong>ḥmu</strong></td>
<td><strong>ss-ḥmu</strong></td>
<td><strong>ss-ḥmaw</strong></td>
</tr>
<tr>
<td>---</td>
<td><strong>ss-endDate</strong></td>
<td><strong>ss-endaw</strong></td>
</tr>
</tbody>
</table>
| **ttru**    | **ss-ttru** | **ss-ttraw** | ‘make cry’
| **yli**     | **ss-eyli** | **ss-eylay** | ‘swallow’ |
| **selli**   | **ss-selli ~ ss-selea** | **ss-seelay** | ‘make ascend, lift’ |

A particular case is the following **a**-final verb which forms the Imperfective in the same way as the Imperfectives of the **cci** verbs above. It takes an obligatory deictic clitic **d** / **id**.

<table>
<thead>
<tr>
<th>non-derived</th>
<th>Aorist</th>
<th>Imperfective</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>myi</strong></td>
<td><strong>ss-emya (d)</strong></td>
<td><strong>ss-emyay (d)</strong></td>
</tr>
</tbody>
</table>

In the following verb, the labialisation found in the Aorist is absent in the Imperfective:

<table>
<thead>
<tr>
<th>non-derived</th>
<th>Aorist</th>
<th>Imperfective</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>gguz (gg</strong>ez**)**</td>
<td><strong>ss-aguz (/ss-ag</strong>ez/<strong>)</strong></td>
<td><strong>ss-agaz</strong></td>
</tr>
</tbody>
</table>

### 7.7.3.2. Insertion of **u**

The following verbs insert **u** before the final consonant in the Imperfective.

<table>
<thead>
<tr>
<th>non-derived</th>
<th>Aorist</th>
<th>Imperfective</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>nes</strong></td>
<td><strong>s-nes</strong></td>
<td><strong>ss-nus</strong></td>
</tr>
</tbody>
</table>

---

81 In this case it seems that an **ss-** prefix precedes a **tt-** prefix. However, in this verb the **tt-** is part of the base **ttru** ‘cry’. In other Berber varieties, e.g. Riffian, **tt-ru** is the Imperfective form of the verb **ru**.
Note the two following cases which are partly identical in the Aorist and the Imperfective. The difference is that the Aorist has a labialised consonant whereas the Imperfective has a full vowel u (for the behaviour of labialised consonants see II.4.):

7.7.3.3. Insertion of i

These vowel i is inserted in the following two verbs. None of these verbs has a non-derived form.

7.7.3.4. No change

Some verbs have an Imperfective that is identical to the Aorist.

--- u appears in some positions before the final consonant.
--- We can tell for sure that the u in the Imperfective is not labialisation because of its fixed position. Labialisation in the Aorist changes position according to syllabification, for example 1:SG ssurɣ-ax ‘I lit’ 3.M:SG i-ssruɣ ‘he lit’. In the Imperfective the vowel does not change position, e.g. 1:SG ssruɣ-ax ‘I lite’ 3.M:SG i-ssruɣ ‘he lites’.
<table>
<thead>
<tr>
<th>non-derived</th>
<th>Aorist</th>
<th>Imperfective</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>eum</em></td>
<td>ss-<em>eum</em></td>
<td>*ss-<em>eum</em></td>
<td>‘let, make swim’</td>
</tr>
<tr>
<td><em>qqur</em></td>
<td>ss-<em>qar</em> ~ ss-<em>yar</em></td>
<td>ss-<em>qar</em> ~ ss-<em>yar</em></td>
<td>‘make dry’</td>
</tr>
<tr>
<td></td>
<td>~ ss-<em>yur</em></td>
<td>~ ss-<em>yur</em></td>
<td></td>
</tr>
<tr>
<td><em>faw (d)</em></td>
<td>ss-<em>faw</em> (d)</td>
<td>ss-<em>faw</em> (d)</td>
<td>‘make become’</td>
</tr>
<tr>
<td><em>ymur</em></td>
<td>sse-<em>ymur</em></td>
<td>sse-<em>ymur</em></td>
<td>‘make grow’</td>
</tr>
<tr>
<td><em>fiq</em></td>
<td>ss-<em>fiq</em></td>
<td>ss-<em>fiq</em></td>
<td>‘wake up’</td>
</tr>
<tr>
<td><em>qqim</em></td>
<td>ss-<em>qim</em></td>
<td>ss-<em>qim</em></td>
<td>‘make sit’</td>
</tr>
<tr>
<td><em>wešk</em></td>
<td>š-<em>wešk</em></td>
<td>š-<em>wešk</em></td>
<td>‘make disappear’</td>
</tr>
<tr>
<td><em>ggull</em></td>
<td>s-<em>gall</em></td>
<td>s-<em>gall</em></td>
<td>‘make swear’</td>
</tr>
</tbody>
</table>

There are two verbs which do not have a non-derived counterpart and prefix a t- in the Imperfective.

<table>
<thead>
<tr>
<th>non-derived</th>
<th>Aorist</th>
<th>Imperfective</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>susušef</em></td>
<td></td>
<td><em>tsusušuf</em></td>
<td>‘spit’</td>
</tr>
<tr>
<td><em>susem</em></td>
<td></td>
<td><em>tsusušum</em></td>
<td>‘hear’</td>
</tr>
</tbody>
</table>
8. The Arabic-morphology verb

In this section we present Arabic verbs that retain the original Arabic morphology in Ghomara Berber\textsuperscript{84}. Many Arabic verbs are borrowed without being integrated in the Berber system (approximately 19\% of all verbs in our corpus). The borrowing can include the preverbal future marker (š ~ maš ~ ya) and postverbal clitics (DO and IO, see III.11.5.). Arabic verbs maximally consist of a stem, a passive derivational prefix tt- (~t-) or n-, and conjugational affixes. The lexical stem can be biliteral, triliteral or quadriliteral\textsuperscript{85}. Biliteral verbs often contain a vowel, other types less often so. The conjugational affixes mark person (first, second and third), number (singular and plural) and gender (masculine and feminine, in the singular). Conjugational affixes come in two sets, which will be called by the names common in Arabic linguistics; the Perfect (also: suffix) conjugation and the Imperfect (also: prefix) conjugation.

The vowels of non-derived biliteral verbs often change between Perfect and Imperfect aspectual forms, but not in the derived forms. The Arabic verb can be schematised as follows (excluding preverbal particles):

\[
\begin{array}{cccc}
\text{PNG.ASP} & \text{deriv.} & \text{stem (ASP)} & \text{PNG.ASP} \\
\text{i-} & \text{t-} & \text{bae} & \text{u} \\
3\text{MPL:IMPF} & \text{PASS} & \text{sell} & 3\text{MPL:IMPF}
\end{array}
\]

‘They are sold’

8.1. Verbal Affixes

The Arabic verb class, faithful to Arabic morphology, has three sets of verbal affixes, one of the Perfect and one for the Imperfect, and an Imperative set. In the following overview the verbal affixes of the Perfect and the Imperfect are presented.

<table>
<thead>
<tr>
<th>Perfect</th>
<th>1:SG</th>
<th>-t ~ -t</th>
<th>ššad-ît</th>
<th>ereq-t</th>
<th>qri-t</th>
<th>‘hunt/fish’\textsuperscript{86}</th>
<th>‘sweat’</th>
<th>‘learn/read’</th>
</tr>
</thead>
<tbody>
<tr>
<td>2:SG</td>
<td>-t ~ -t / -ti ~ -ti</td>
<td>ššad-ît / -iṭi</td>
<td>ereq-t / -ti</td>
<td>qri-t / -ti</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3:M:SG</td>
<td>-</td>
<td>ššad</td>
<td>ereq</td>
<td>qra</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3:F:SG</td>
<td>-t</td>
<td>ššad-et</td>
<td>ereq-et</td>
<td>qra-t</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1:PL</td>
<td>-na</td>
<td>ššad-na / -ina</td>
<td>ereq-na</td>
<td>qri-na</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2:PL</td>
<td>-tum ~ -tum / -tu</td>
<td>ššad-tum / -iṭum</td>
<td>ereq-tum(m)</td>
<td>qri-tum(m)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3:PL</td>
<td>-u</td>
<td>ššad-u</td>
<td>ereq-u</td>
<td>qra-w</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\textsuperscript{84} 118 Verbs (approximately 19\%) on a total of 639 verbs in our database retain Arabic morphology.

\textsuperscript{85} Here we apply the same definition of the lexical stem as in the part on Berber verbs (cf. III.7.1.).

\textsuperscript{86} The insertion of the i before a first or second person suffix is optional.
The form -t immediately follows a vowel while -t immediately follows a consonant in the Perfect (cf. II.1.10. for phonological rules). There is no gender distinction in the second person singular, which is typical of Jbala Arabic; the suffix is either -t (~ -t) or -ti (~ -ṭi). The second person plural is either -tu (~ ṭu) or -tum (~ ṭum). In the Perfect an i is optionally inserted in stems ending in a double consonant, whether they are derived or not. Stems ending in a change to i in the first and second person (see examples below).

In the Imperfect, d- is the prefix of the second person singular and plural and the third person feminine singular. Sometimes t- occurs in that position. The Imperfect has a preverbal marker ka- in most contexts (cf. IV.8.2.2. for ka-). In both aspects, the plural suffix -u becomes w when following a vowel.

The Imperative

Imperative stems are the same as the Imperfect, but take special verbal indices. The suffixes of the Imperative are Ø for the singular and -u for the plural. The vowel u becomes w after a vowel.

<table>
<thead>
<tr>
<th>Imperfect</th>
<th>‘hunt/fish’</th>
<th>‘sweat’</th>
<th>‘learn/read’</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:SG</td>
<td>n-</td>
<td>(ka-)ne-ṣṣaḏ</td>
<td>(ka-)ne-ereq</td>
</tr>
<tr>
<td>2:SG</td>
<td>d-</td>
<td>(ka-)de-ṣṣaḏ</td>
<td>(ka-)de-ereq</td>
</tr>
<tr>
<td>3:M:SG</td>
<td>y-</td>
<td>(ka-)ye-ṣṣaḏ</td>
<td>(ka-)ye-ereq</td>
</tr>
<tr>
<td>3:F:SG</td>
<td>d-</td>
<td>(ka-)de-ṣṣaḏ</td>
<td>(ka-)de-ereq</td>
</tr>
<tr>
<td>1:PL</td>
<td>n - u</td>
<td>(ka-)ne-ṣṣaḏ-u</td>
<td>(ka-)n ereq-u</td>
</tr>
<tr>
<td>2:PL</td>
<td>d – u</td>
<td>(ka-)de-ṣṣaḏ-u</td>
<td>(ka-)d ereq-u</td>
</tr>
<tr>
<td>3:PL</td>
<td>y - u</td>
<td>(ka-)ye-ṣṣaḏ-u</td>
<td>(ka-)y ereq-u</td>
</tr>
</tbody>
</table>

The form -t immediately follows a vowel while -t immediately follows a consonant in the Perfect (cf. II.1.10. for phonological rules). There is no gender distinction in the second person singular, which is typical of Jbala Arabic; the suffix is either -t (~ -t) or -ti (~ -ṭi). The second person plural is either -tu (~ ṭu) or -tum (~ ṭum). In the Perfect an i is optionally inserted in stems ending in a double consonant, whether they are derived or not. Stems ending in a change to i in the first and second person (see examples below).

In the Imperfect, d- is the prefix of the second person singular and plural and the third person feminine singular. Sometimes t- occurs in that position. The Imperfect has a preverbal marker ka- in most contexts (cf. IV.8.2.2. for ka-). In both aspects, the plural suffix -u becomes w when following a vowel.

The Imperative

Imperative stems are the same as the Imperfect, but take special verbal indices. The suffixes of the Imperative are Ø for the singular and -u for the plural. The vowel u becomes w after a vowel.

Imperative

<table>
<thead>
<tr>
<th>SG</th>
<th>PL</th>
</tr>
</thead>
<tbody>
<tr>
<td>ṣṣaḏ</td>
<td>ṣṣaḏ-u</td>
</tr>
<tr>
<td>qra</td>
<td>qra-w</td>
</tr>
</tbody>
</table>

‘hunt, fish’

‘learn, read’

87 Both the Jbala dialects described in Vicente (2000:61) and Moscoso (2003: 63) do not have a gender distinction in second person singular. However, the difference with Ghomara is that both dialects only have suffix -t in the Perfect. The variant described by Caubet (1993: 31-32) near Fes has only second person -ti in the Perfect, but distinguishes gender in the second person of the Imperfect conjugation.

88 In the Maghreb the plural suffix -tum / -ṭum is unique to the Jbala region. For the dialect of Anjra the form ṭum is described by Vicente (2000: 62).
8.2. Verb types

In our discussion we make a distinction between non-derived and derived verb types. Non-derived verbs consist of several types which have two consonants and a vowel, three consonants or four consonants. The fact that verbs of these structures also exist in the Berber-morphology class shows that it is lexically determined which verb goes into one or the other class. The derived verbs can be subdivided into tt ~ t derived verbs and n-derived verbs (which often interact). Finally, there are some verbs which have other types of derivations.

8.2.1. Verb types with vowel change

Non-derived verbs which have less than three stem consonants are characterised by vowel change or vowel insertion, differentiating Perfect from Imperfect stems. Some verbs have a first and second person vowel in the Perfect which differs from the third person vowel, whereas the Imperfect vowel is the same for all persons. Suffixation may involve vowel insertion or change. The names traditionally used in Arabic linguistics are given between brackets.

**cC ~ cvC (geminated verbs)**

The so-called geminated verbs have a geminate final consonant. In the Perfect the vowel i is inserted between the verb and the suffix of the first and second person singular and plural forms. Verbs of this type either have u after the first base consonant in the Imperfect, which is optional, or they have i. In the Perfect verbs can have u\(^9\). An example of such a verb is:

<table>
<thead>
<tr>
<th>1:SG</th>
<th>Perfect</th>
<th>Imperfect</th>
</tr>
</thead>
<tbody>
<tr>
<td>fekk-\textit{it}</td>
<td>‘I rescued’</td>
<td>n-fukkan</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2:SG</th>
<th>Perfect</th>
<th>Imperfect</th>
</tr>
</thead>
<tbody>
<tr>
<td>fekk-\textit{it(i)}</td>
<td>‘You rescued’</td>
<td>d-fukkan</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3:M:SG</th>
<th>Perfect</th>
<th>Imperfect</th>
</tr>
</thead>
<tbody>
<tr>
<td>fekk</td>
<td>‘He rescued’</td>
<td>i-fukkan</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3:F:SG</th>
<th>Perfect</th>
<th>Imperfect</th>
</tr>
</thead>
<tbody>
<tr>
<td>fekk-\textit{et}</td>
<td>‘She rescued’</td>
<td>d-fukkan</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1:PL</th>
<th>Perfect</th>
<th>Imperfect</th>
</tr>
</thead>
<tbody>
<tr>
<td>fekk-(i)\textit{na}</td>
<td>‘We rescued’</td>
<td>n-fukkan-u</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2:PL</th>
<th>Perfect</th>
<th>Imperfect</th>
</tr>
</thead>
<tbody>
<tr>
<td>fekk-(i)\textit{tu(m)}</td>
<td>‘You rescued’</td>
<td>d-fukkan-u</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3:PL</th>
<th>Perfect</th>
<th>Imperfect</th>
</tr>
</thead>
<tbody>
<tr>
<td>fekk-\textit{u}</td>
<td>‘They rescued’</td>
<td>y-fukkan-u</td>
</tr>
</tbody>
</table>

Some verbs of this type are:

<table>
<thead>
<tr>
<th>Perfect</th>
<th>Imperfect</th>
</tr>
</thead>
<tbody>
<tr>
<td>cC ~ cuC</td>
<td>cC ~ cuC</td>
</tr>
</tbody>
</table>

---

\(^9\) Moscoso writes that this type of verb can get a, i or u in the Imperfective (2000:68).
yešš ~ yušš  
šèkk ~ šukk  
fekk  

<table>
<thead>
<tr>
<th>Perfect</th>
<th>Imperfect</th>
</tr>
</thead>
<tbody>
<tr>
<td>eC</td>
<td>ciC</td>
</tr>
<tr>
<td>ēess</td>
<td>ēiss</td>
</tr>
<tr>
<td>ḥebb</td>
<td>ḥibb</td>
</tr>
</tbody>
</table>

**cvc (‘hollow verbs’)**

Verbs with a medial full vowel (in the Arabic linguistic tradition called ‘hollow verbs’), have a in the third person of the Perfect. In the Imperfect and the first and second person of the Perfect, depending on the verb, the vowel is a, i or u (which means that a number of verbs do not have a vowel change). For example the verb yam - iyum ‘bottle up (anger/sorrow)’.

<table>
<thead>
<tr>
<th>Perfect</th>
<th>Imperfect</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:SG</td>
<td>yum-t</td>
</tr>
<tr>
<td>2:SG</td>
<td>yum-t(i)</td>
</tr>
<tr>
<td>3:M:SG</td>
<td>yam</td>
</tr>
<tr>
<td>3:F:SG</td>
<td>yam-et</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Perfect</th>
<th>Imperfect</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:PL</td>
<td>yum-na</td>
</tr>
<tr>
<td>2:PL</td>
<td>yum-tum</td>
</tr>
<tr>
<td>3:PL</td>
<td>yum-u</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Perfect</th>
<th>Imperfect</th>
</tr>
</thead>
<tbody>
<tr>
<td>cac</td>
<td>cac</td>
</tr>
<tr>
<td>sal</td>
<td>sal</td>
</tr>
<tr>
<td>ban</td>
<td>ban</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Perfect</th>
<th>Imperfect</th>
</tr>
</thead>
<tbody>
<tr>
<td>cac</td>
<td>cic</td>
</tr>
<tr>
<td>ḥas</td>
<td>ḥis</td>
</tr>
<tr>
<td>sar</td>
<td>sir</td>
</tr>
<tr>
<td>ēaq</td>
<td>ēiq</td>
</tr>
<tr>
<td>qaṛ</td>
<td>qir</td>
</tr>
</tbody>
</table>
Verbs with a final vowel show variation between a in the first and second person and i in the third person of the Perfect. Depending on the verb, the Imperfect has a or i throughout the whole paradigm. For example the verb qra – yeqra ‘read, learn’:

<table>
<thead>
<tr>
<th>Perfect</th>
<th>Imperfect</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:SG</td>
<td>qri-t</td>
</tr>
<tr>
<td></td>
<td>‘I read/learned’</td>
</tr>
<tr>
<td>2:SG</td>
<td>qri-t/qri-ti</td>
</tr>
<tr>
<td></td>
<td>‘You read/learned’</td>
</tr>
<tr>
<td>3:M:SG</td>
<td>qra</td>
</tr>
<tr>
<td></td>
<td>‘He read/learned’</td>
</tr>
<tr>
<td>3:F:SG</td>
<td>qra-t</td>
</tr>
<tr>
<td></td>
<td>‘She read/learned’</td>
</tr>
<tr>
<td>1:PL</td>
<td>qri-na</td>
</tr>
<tr>
<td></td>
<td>‘We read/learned’</td>
</tr>
<tr>
<td>2:PL</td>
<td>qri-tu</td>
</tr>
<tr>
<td></td>
<td>‘You read/learned’</td>
</tr>
<tr>
<td>3:PL</td>
<td>qra-w</td>
</tr>
<tr>
<td></td>
<td>‘They read/learned’</td>
</tr>
</tbody>
</table>

Other verbs of this type are:

<table>
<thead>
<tr>
<th>Perfect</th>
<th>Imperfect</th>
</tr>
</thead>
<tbody>
<tr>
<td>cca</td>
<td>cca</td>
</tr>
<tr>
<td>hfa</td>
<td>hfa</td>
</tr>
<tr>
<td>tfa</td>
<td>tfa</td>
</tr>
<tr>
<td>eya</td>
<td>eya</td>
</tr>
<tr>
<td>xra</td>
<td>xra</td>
</tr>
<tr>
<td>rğa</td>
<td>rğa</td>
</tr>
<tr>
<td>qra</td>
<td>qra</td>
</tr>
</tbody>
</table>

---

ccv (and cvcv) verbs (defective verb)

Verbs with a final vowel show variation between a in the first and second person and i in the third person of the Perfect. Depending on the verb, the Imperfect has a or i throughout the whole paradigm. For example the verb qra – yeqra ‘read, learn’:

<table>
<thead>
<tr>
<th>Perfect</th>
<th>Imperfect</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:SG</td>
<td>qri-t</td>
</tr>
<tr>
<td></td>
<td>‘I read/learned’</td>
</tr>
<tr>
<td>2:SG</td>
<td>qri-t/qri-ti</td>
</tr>
<tr>
<td></td>
<td>‘You read/learned’</td>
</tr>
<tr>
<td>3:M:SG</td>
<td>qra</td>
</tr>
<tr>
<td></td>
<td>‘He read/learned’</td>
</tr>
<tr>
<td>3:F:SG</td>
<td>qra-t</td>
</tr>
<tr>
<td></td>
<td>‘She read/learned’</td>
</tr>
<tr>
<td>1:PL</td>
<td>qri-na</td>
</tr>
<tr>
<td></td>
<td>‘We read/learned’</td>
</tr>
<tr>
<td>2:PL</td>
<td>qri-tu</td>
</tr>
<tr>
<td></td>
<td>‘You read/learned’</td>
</tr>
<tr>
<td>3:PL</td>
<td>qra-w</td>
</tr>
<tr>
<td></td>
<td>‘They read/learned’</td>
</tr>
</tbody>
</table>

Other verbs of this type are:

<table>
<thead>
<tr>
<th>Perfect</th>
<th>Imperfect</th>
</tr>
</thead>
<tbody>
<tr>
<td>cca</td>
<td>cca</td>
</tr>
<tr>
<td>hfa</td>
<td>hfa</td>
</tr>
<tr>
<td>tfa</td>
<td>tfa</td>
</tr>
<tr>
<td>eya</td>
<td>eya</td>
</tr>
<tr>
<td>xra</td>
<td>xra</td>
</tr>
<tr>
<td>rğa</td>
<td>rğa</td>
</tr>
<tr>
<td>qra</td>
<td>qra</td>
</tr>
</tbody>
</table>

---

90 One informant conjugated only the Perfective of this verb using Berber conjugation. Others consistently used Arabic morphology.
<table>
<thead>
<tr>
<th>Perfect</th>
<th>Imperfect</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>kma</code></td>
<td><code>kmi</code></td>
</tr>
<tr>
<td><code>kra</code></td>
<td><code>kri</code></td>
</tr>
<tr>
<td><code>bya</code></td>
<td><code>byi</code></td>
</tr>
<tr>
<td><code>ḥka</code></td>
<td><code>ḥki</code></td>
</tr>
<tr>
<td><code>zna</code></td>
<td><code>zni</code></td>
</tr>
</tbody>
</table>

This type is common in both the Berber and the Arabic-morphology class. A considerable number of ccc verbs (48) have Arabic morphology. There is no difference between the form of the Perfect and the Imperfect. Some of the verbs of this type are:

<table>
<thead>
<tr>
<th>Perfect</th>
<th>Imperfect</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>breq</code></td>
<td><code>breq</code></td>
</tr>
<tr>
<td><code>ften</code></td>
<td><code>ften</code></td>
</tr>
<tr>
<td><code>ndem</code></td>
<td><code>ndem</code></td>
</tr>
<tr>
<td><code>ɣleḍ̱</code></td>
<td><code>ɣleḍ̱</code></td>
</tr>
<tr>
<td><code>šxeṛ</code></td>
<td><code>šxeṛ</code></td>
</tr>
<tr>
<td><code>egez</code></td>
<td><code>egez</code></td>
</tr>
<tr>
<td><code>sker</code></td>
<td><code>sker</code></td>
</tr>
<tr>
<td><code>eteš</code></td>
<td><code>eteš</code></td>
</tr>
<tr>
<td><code>qder</code></td>
<td><code>qder</code></td>
</tr>
<tr>
<td><code>wzen</code></td>
<td><code>wzen</code></td>
</tr>
</tbody>
</table>

The following verb has a glottal stop in initial position:

<table>
<thead>
<tr>
<th>Perfect</th>
<th>Imperfect</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>ʔameṛ</code></td>
<td><code>ʔameṛ</code></td>
</tr>
</tbody>
</table>

There is one verb in our corpus which has the form `caCec, ʔammen`. It is in free variation with `t-ʔammen` ‘trust’.

<table>
<thead>
<tr>
<th>Perfect</th>
<th>Imperfect</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>ʔammen</code></td>
<td><code>ʔammen</code></td>
</tr>
</tbody>
</table>

---

91 Glottal stops occur in borrowings from Standard Arabic. In the course of history they were lost in colloquial Arabic (cf. Heath, 2002: 179). This is not a stem III verb.
There is one non-derived four-consonantal verb in our corpus. The final vowel of the verb changes from a in the Perfect to i in the Imperfect and in the first and second person of the Perfect.

<table>
<thead>
<tr>
<th>Perfect</th>
<th>Imperfect</th>
</tr>
</thead>
<tbody>
<tr>
<td>dumanḍa</td>
<td>dumanḍi</td>
</tr>
</tbody>
</table>

‘command or order’

cCv

There is one cCv verb in our corpus which has Arabic-morphology.

<table>
<thead>
<tr>
<th>Perfect</th>
<th>Imperfect</th>
</tr>
</thead>
<tbody>
<tr>
<td>mella</td>
<td>melli</td>
</tr>
</tbody>
</table>

‘be fed up’

8.3. Derived verbs

In this section we will present the tt ~ t- and n- derived verbs.

8.3.1. tt ~ t Derived verbs

Verbs with the tt ~ t and n derivation always have Arabic inflection. The variation between tt and t is at least tendentially conditioned by the stem form: tt tends to appear when the verb stem begins with two consonants without a vowel in between (including schwa), while the other verb types prefer t. The vowel quality is stable between aspectual stems; therefore only one form is presented. Verb stems ending in a vowel have i in the first and second person (singular and plural) and a in the third person (singular and plural) in the Perfect.

**t-cC**

<table>
<thead>
<tr>
<th>verb</th>
<th>meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>t-šedd</td>
<td>‘be tie, be closed’</td>
</tr>
</tbody>
</table>

**t-cac**

<table>
<thead>
<tr>
<th>verb</th>
<th>meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>t-♭ac (~ n-♭ac)</td>
<td>‘be sold’</td>
</tr>
<tr>
<td>t-maḥ</td>
<td>‘be emptied of water’</td>
</tr>
<tr>
<td>t-♭an</td>
<td>‘appear’</td>
</tr>
<tr>
<td>t-♭al</td>
<td>‘be guessed’</td>
</tr>
</tbody>
</table>

**t-cca**

<table>
<thead>
<tr>
<th>verb</th>
<th>meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>t-♭exwa</td>
<td>‘be hollowed out’</td>
</tr>
<tr>
<td>t-♭eṣra</td>
<td>‘be bought’</td>
</tr>
<tr>
<td>tt-eqla</td>
<td>‘be fried’</td>
</tr>
<tr>
<td>tt-eqra</td>
<td>‘be studied, be read’</td>
</tr>
</tbody>
</table>
There are two verbs from standard Arabic in this group which have a glottal stop in stem-initial position.

- **t-herrek**  
  ‘move’

- **t-keyyef**  
  ‘smoke’

- **t-ceṭtel**  
  ‘be late’

- **t-cellem**  
  ‘learn’

- **t-hendedor**  
  ‘threaten’

- **t-seyyeb**  
  ‘be thrown’

- **t-ȝeyýer**  
  ‘whitewash’

- **t-ewweẓ**  
  ‘be bent’

- **t-rewweḥ**  
  ‘be lifted, be returned’

- **t-xeṣef**  
  ‘be light’

- **t-ʔekked**  
  ‘be guaranteed’

- **t-ʔammen (~ ʔammen)**  
  ‘trust’

**t-cCa (stem V)**

- **t-menna**  
  ‘hope’

- **t-yedda**  
  ‘have lunch’

**t-cacc (stem VI)**

- **t-taṣer**  
  ‘be last’

- **t-dafen**  
  ‘fight (each other)’

- **t-daṣez**  
  ‘fight (each other)’

- **tt-hawed**  
  ‘talk (to each other)’

- **t-sameḥ**  
  ‘forgive (each other)’
There are a number of quadriliteral verbs with t- passive derivation.

- **t-berɣez** ‘be swapped’
- **t-eptaʃef** ‘guess’
- **t-penčer** ‘be stabbed’
- **t-qefqef** ‘shiver’
- **t-selsel** ‘be baked (grain)’
- **t-ṣerwel** ‘be clothed with trousers’
- **t-xerčef** ‘speak unclearly’
- **t-zeezec** ‘tremble’
- **t-yaylef** ‘become angry’
- **t-yeɾbel** ‘be sieved’

There is one verb of Spanish origin of the type cacca. In the first and second person singular the a becomes i.

- **t-ṣalta** ‘dive’

### 8.3.2. n- derived verbs (stem VII)

Verbs derived by means of the prefix n also receive Arabic inflection. We present all the verbs in our corpus here. A number of verbs have free variation between the two passive prefixes n and tt ~ t.

- **n-edfeɛ** ‘be pushed’
- **n-eqret** ‘break’
- **n-tellef** ‘be lost, be dissapeared’
- **n-exterh** ‘be asked to marry’
- **n-eẓezel** ‘be filtered, be separated’
- **n-ečzen** ‘be kneaded’
- **n-eyder** ‘be betrayed’
<table>
<thead>
<tr>
<th>Verb</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>n-edfer</td>
<td>‘be tied (hair)’</td>
</tr>
<tr>
<td>n-edṛeb</td>
<td>‘be hit’</td>
</tr>
<tr>
<td>n-bḥet</td>
<td>‘be astonished’</td>
</tr>
<tr>
<td>n-efḏeḥ (~ tt-efḏeḥ)</td>
<td>‘be caught’</td>
</tr>
<tr>
<td>n-eeqel (~ t-eeqel)</td>
<td>‘be recognised’</td>
</tr>
<tr>
<td>n-ekteḇ (~ tt-ekteḇ)</td>
<td>‘be written’</td>
</tr>
<tr>
<td>n-bac (~ t-bac)</td>
<td>‘be sold’</td>
</tr>
<tr>
<td>n-šaq (~ t-šaq)</td>
<td>‘be split’</td>
</tr>
</tbody>
</table>

### 8.3.3. Other derivations

The three schemes presented here have an infix t-, a prefix st- or a vowel a inserted.

**ctcc ~ ctacc (stem VIII)**

A small number of verbs have a t infix after the stem-initial consonant.

<table>
<thead>
<tr>
<th>Verb</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>rtceḇ</td>
<td>‘be scared’</td>
</tr>
<tr>
<td>ntaṣer</td>
<td>‘win over’</td>
</tr>
<tr>
<td>ktašef</td>
<td>‘guess’</td>
</tr>
<tr>
<td>etaref</td>
<td>‘admit, recognise’</td>
</tr>
<tr>
<td>štauer</td>
<td>‘consult’</td>
</tr>
</tbody>
</table>

The verb šṣaḏ ‘hunt’ has initial st has become šš through assimilation. The Perfect of this verb gets an optional i inserted between the stem and the suffix.

<table>
<thead>
<tr>
<th>Verbal Form</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>šṣaḏ</td>
<td>‘hunt’</td>
</tr>
</tbody>
</table>

**ccac (similar to stem XI)**

The following verbs all have an a before the final vowel.

<table>
<thead>
<tr>
<th>Verb</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>ṣṭar</td>
<td>‘ruminate’</td>
</tr>
<tr>
<td>shal</td>
<td>‘become, be easy’</td>
</tr>
<tr>
<td>ɛšar</td>
<td>‘be pregnant’</td>
</tr>
<tr>
<td>yraq</td>
<td>‘drown’</td>
</tr>
<tr>
<td>zham</td>
<td>‘bad’</td>
</tr>
<tr>
<td>ḥtaẓ</td>
<td>‘need’</td>
</tr>
<tr>
<td>ḫmar</td>
<td>‘tan, redden’</td>
</tr>
</tbody>
</table>

---

92 According to Moscoso (2002: 100), basing himself on Marçais and Destaing, this form is used in the north of Morocco as opposed to ṣeyyed (form II), which is typically used in the south.
$tqal$  
‘become heavy’

**stccc (stem X)**

This type takes the prefix `st-` and is unproductive. Very few verbs take this prefix.

$stečžeḇ$  
‘astonished’

$stanes$  
‘get used to’
9. The adjective

The adjective in Ghomara Berber is a word class of its own. This makes it significantly different from other Northern Berber languages (so excluding Tuareg and Ghadames) in which the adjective constitutes ‘une sous-classe du Nom et est identifié fondamentalement par sa syntaxe et, secondairement, par sa morphologie (son signifiant)’ (Chaker 1985: 1). The Berber adjective has all the morphological and syntactic characteristics of the noun including the expression of gender, number and state and the possibility to function as a predicate nominal. In fact, it only differs from common nouns ‘par la capacité qu'il a de déterminer directement un substantif (séquence immédiate, sans marque autre que la position)’ (Chaker, 1985: 2). The adjective in these languages shares all the characteristics of nouns, and in addition it has the capacity to qualify nouns. Therefore this group of nouns which expresses ‘property concepts’ is to be considered a sub-group of the noun. Galand (2002:199) basically adopts the same view regarding the adjective. In his view it is difficult to distinguish the adjective from other nouns on the basis of morphological criteria. However, only this sub-group of the noun has the possibility to function as the second noun in what Galand calls a ‘syntagme de reprise’ (2002: 199).

In Ghomara Berber the adjective class is clearly definable by a number of features. First of all, Berber adjectives have a unique form, not found in any other word class. Only four adjectives have Berber morphology, all of which are clearly of Berber etymological origin. They originally stem from the so-called stative verbs which have a specific verbal conjugation in many Berber languages (for an overview cf. Kossmann, 2009). In Ghomara Berber they differ in that there is only gender and number marking, and no person marking. Furthermore, these forms do not distinguish verbal aspectual stems. The three Berber adjectives meqquṛ ‘big’, meẓẓi ‘small’ and messus ‘insipid’ have only two forms: masculine singular agreement on the one hand and feminine singular / plural agreement. One adjective of Berber origin, mellul ‘white’, has a dedicated plural suffix -in in free variation with the feminine singular / plural suffix -eṯ. The following scheme provides an overview of the forms.

<table>
<thead>
<tr>
<th></th>
<th>‘big’</th>
<th>‘small’</th>
<th>‘insipid’</th>
</tr>
</thead>
<tbody>
<tr>
<td>M:SG</td>
<td>-</td>
<td>meqquṛ (meqqwet)</td>
<td>meẓẓi</td>
</tr>
<tr>
<td>F:SG</td>
<td>-t ~ -eṯ</td>
<td>muqqṛ-eṯ</td>
<td>meẓẓi-t</td>
</tr>
<tr>
<td>PL</td>
<td>-t ~ -e t</td>
<td>muqqṛ-eṯ</td>
<td>meẓẓi-t</td>
</tr>
</tbody>
</table>

The plural suffix of adjective mellul ‘white’ is either -eṯ or -in.

---

93 In the dialect of Ayt Bšir (Senhaja de Sraïr) the perfective of certain stative verbs (e.g. meqquṛ ‘be big’) which function as complements have the same indices in the singular, and -en in the plural (Lafkioui 2007:165; Lafkioui, 2009:111).
‘white’

M:SG - mellul
F:SG -et mellul-et
PL -et ~ -in mellul-et/-in

All other adjectives are borrowings from colloquial Arabic and follow Arabic morphological rules. Arabic-morphology adjectives express agreement differently from Berber adjectives. They make a distinction between masculine singular, feminine singular and plural. Like nouns Arabic-morphology adjectives occur in several schemes. An important difference between Arabic-based nouns and adjectives is that most Arabic nouns have inherent gender, while gender marking on the adjective is governed by the head noun (Caubet, 1993:59).

Morphologically, there are two main types of Arabic-morphology adjectives, adjectives that take the suffix -in in the plural and adjectives that form the plural through vowel apophony.

The suffixes that the Arabic-morphology adjectives take are listed below:

<table>
<thead>
<tr>
<th>Type 1</th>
<th>Type 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘tall’</td>
<td>‘yellow’</td>
</tr>
<tr>
<td>M:SG -</td>
<td>ṭwil</td>
</tr>
<tr>
<td>F:SG -a</td>
<td>ṭwil-a</td>
</tr>
<tr>
<td>PL -in</td>
<td>ṭwil-in</td>
</tr>
</tbody>
</table>

There are a number of syntactic features that define the adjective class:

1. The Relative Form: All adjectives allow for the relative form (or: Berber participle)\(^{94}\).

Relative forms of adjectives always function as modifiers. For example:

(1) iberriyen a y-meṣṣi-n ma ga-sen ši n ḫemm bezzaf
    sheep REL RF-small-RF NEG in-3PL NEG of meat a.lot
    ‘Small sheep do not have a lot of flesh.’

(2) lektab n umḥadri a y-ṭwil-in
    book of student:EA REL RF-tall-RF
    ‘The book of the tall student.’

---

\(^{94}\) In Berberology the term participle refers to the verbal form which is used in subject relative clauses (cf. III.7.4. for the relative form). In Ghomara Berber the use of the participle is extended to the adjectives.
2. Head of an NP: The adjective can be the head of a noun phrase, including expression of the Arabic article l-. The use of the article is optional and shows the nominalisation of the adjective.

(3) i-dda d meṣṣi i meqquṛ
3MS-come:P DC small and big
The small and the big have come.

(4) i-dda d l-meṣṣi i l-meqquṛ
3MS-come:P DC ART-small and ART-big
The small and the big have come.

(5) le-khel i le-ḥmer safr-en dar ya tmazirt beid-a
ART-black and ART-red travel:P-3PL to one:F land far-FS
‘The black one and the red one traveled to a far-away country.’

3. Modifier of a Head Noun: Unlike nouns, adjectives occur as modifiers of head (pro)nouns. They agree in gender and number with the head. The following examples illustrate the use of the Berber adjectives. In (6) the adjective modifies a feminine singular head noun. In (7) the modified head noun is plural and therefore the adjective has the same agreement marker as (6). In (8), (9) and (10) Arabic-morphology adjectives are shown.

(6) deyya h-teellay g ya tğigetto muqqreṭ
quickly 3FS-go.up:I in one:F tree:EA big-FS
‘She quickly climbs a big tree.’

(7) i-kkreṣ z žuž n ixebbaz muqqreṭ
3MS-plough:I with two of oxen big-PL
‘He ploughs with two big oxen.’

(8) ttawi-n = d yah lgayza, ya usyaṛ yliṭ
take:3PL=DC one:F stick one:M stick:EA thick:MS
‘They bring a stick, a thick stick.’

(9) tamyart = ahen ṭwil-a hay te-sskar tawaft
woman:EL=S:ANP tall-FS she:PRES 3FS-do:I bread:EL
‘That tall woman is making bread.’
Examples (11) and (12) show the use of the adjective as a predicate.

(11) taxeyylt muqqṛ-et i wceyyal baqi mezzī
girl:EL big-FS and boy:EA still small:MS
‘The girl is big and the boy is still small.’

(12) lbuffa=yahen n ṭawiḍ̱a ṭqiq-a
tube=S:ANP of tire thin-FS
‘This inner tube of the tire is thin.’

Examples (13) and (14) show the difference between masculine singular and feminine singular agreement on the adjective.

(13) neikki meqqur
I big:MS
‘I am big’ (male speaker)

(14) neikki muqqṛ-et
I big-FS
‘I am big’ (female speaker)

In the remainder of this chapter, the subject relative form and the morphology of Arabic-morphology adjectives are presented. Even though borrowed Arabic passive participles are similar to adjectives, they differ in that they can not be nominalised by means of the article l- (cf. III.10. for the morphology of participles). In the final part of this chapter, Spanish adjectives and the element ‘other’ will be presented.

9.1. The relative form

The morphology of the relative form of adjectives shows some variation. Berber adjectives take the relative form i-STEM-in ~ i-STEM-en (cf. III.7.4. for the relative form of verbs). Arabic adjectives take i-STEM-in, except for adjectives that have an apophonic plural where i-STEM-in is in free variation with i-PLURAL STEM. The latter is considered a relative form because the plural stem has number agreement, but no gender agreement. The relative marker a obligatorily precedes the relative. Schematically, the relative forms of adjectives look as follows:
Berber Relative

meqqur ‘big’
meżzi ‘small’

i-STEM-in ~ i-STEM-en
i-muqr-in/-en  i-meżzi-n

messus ‘insipid’
mellul ‘white’

i-messus-in/-en  i-mellul-in/-en

Arabic Relative

ṭwil ‘tall’
ṣfer ‘yellow’

i-STEM-in / i-PL.STEM
i-ṭwil-in  i-ṣefr-in ~ i-ṣufar

Examples (15) and (16) are Berber-morphology adjectives. Example (17) shows an Arabic-morphology adjective. These examples illustrate that the relative has the same form irrespective of the number and gender of the antecedent. In (18) and (19) the two possibilities of adjectives which form an apophonic plural is shown. The variation is only allowed in the plural of (Arabic-morphology) adjectives that have an apophonic plural.

Singular agreement of these adjectives (and all other adjectives) is established by means of the form i-STEM-in, e.g. example (20).

(15) uleṭma-s = ahen a y-muqr-en
sister-3S = S:ANP REL RF-big-RF
‘His older sister.’

(16) ḥeṛriyen a y-mezzi-n ma ga-sen ści n lḥemm bezzaf
sheep REL RF-small-RF NEG in-3PL NEG of flesh much
‘Small sheep do not have a lot of flesh.’

(17) lektab n umḥadri a y-ṭwil-in
book of student REL RF-tall-RF
‘The book of the tall student.’

(18) isyarən = ihen a y-xeḍr-in ma mezyan-in ści
sticks = PL:ANP REL RF-green-RF NEG good-PL NEG
‘Those thick green sticks are not good.’

(19) isyarən = ihen a y-xuḍer ma mezyan-in ści
sticks = PL:ANP REL RF-green:PL NEG good-PL NEG
‘Those thick green sticks are not good (they are not good for the fire).’
(20) \( \text{asyar} = \text{ahen} \ a \ y-xed\text{r-in} \ ma \ meyan \ ši \)
    stick = S:ANP REL RF-green-RF NEG good NEG
    ‘That green thick stick is not good.’

9.2. Arabic adjectives

Arabic-morphology adjectives are abundant. There exist four major structural types and a number of exceptional types. This division is based on the frequency of the adjectives per type. Adjectives of the major types are numerous, while for each exceptional type there are only one or two adjectives. Within the major types there is a subdivision of adjectives that form their plural by means of the suffix \(-\text{in}\) and adjectives that form their plural by means of vowel apophony. There are two Spanish adjectives which retain their original morphology. A number of active and passive participles function as adjectives as well (cf. III.10. for a full description).

9.2.1. Major types

cceic / cceic-a / cceic-in

This is a common adjective scheme in Moroccan Arabic dialects. Plural formation by means of \(-\text{in}\) (rather than an internal plural) is found only in Morocco, but is far from generally present there (Marçais 1977:119). In nearby Chefchaouen the formation is common (cf. Moscoso 2003:139).

<table>
<thead>
<tr>
<th>M:SG</th>
<th>F:SG</th>
<th>PL</th>
</tr>
</thead>
<tbody>
<tr>
<td>bxil</td>
<td>bxil-a</td>
<td>bxil-in</td>
</tr>
<tr>
<td>bciḍ</td>
<td>bciḍ-a</td>
<td>bciḍ-in</td>
</tr>
<tr>
<td>qlll</td>
<td>qlll-a</td>
<td>qlll-in</td>
</tr>
<tr>
<td>qriḇ</td>
<td>qriḇ-a</td>
<td>qriḇ-in</td>
</tr>
<tr>
<td>qṣir</td>
<td>qṣir-a</td>
<td>qṣir-in</td>
</tr>
<tr>
<td>tqll</td>
<td>tqll-a</td>
<td>tqll-in</td>
</tr>
<tr>
<td>xṣif</td>
<td>xṣif-a</td>
<td>xṣif-in</td>
</tr>
<tr>
<td>xšin</td>
<td>xšin-a</td>
<td>xšin-in</td>
</tr>
<tr>
<td>ždiḍ</td>
<td>ždiḍ-a</td>
<td>ždiḍ-in</td>
</tr>
<tr>
<td>yliṭ</td>
<td>yliṭ-a</td>
<td>yliṭ-in</td>
</tr>
<tr>
<td>ḍeif</td>
<td>ḍeif-a</td>
<td>ḍeif-in</td>
</tr>
<tr>
<td>ḡnin</td>
<td>ḡnin-a</td>
<td>ḡnin-in</td>
</tr>
</tbody>
</table>

‘stingy’
‘far’
‘few’
‘near’
‘short’
‘heavy’
‘light’
‘thick’
‘new’
‘fat’
‘weak’
‘benevolent, mild’

\(^95\) In the dialect Caubet studied this type is different. She writes: ‘Tous les adjectifs en cceic ont un pluriel en ccaic; la plupart du temps, ils ont un deuxième pluriel mixte (schème ccaic + suffixe -in: ccaicin)’ (Caubet, 1993:114).
This adjective type forms its plural by inserting u between the first and the second consonant. Adjectives of this type refer to a colour or a physical deformity. Note that colour adjectives can be nominalised by means of the prefix a- and the suffix -aw (cf. III.4.3.). These nominalisations are only reluctantly accepted in predicative or attributive position. Thus, there was discussion about the grammaticality of the elicited examples (21) and (22). Most speakers would rather use the adjective or the subject relative form of the adjective. After discussion some people reluctantly agreed on the grammaticality of the phrases, while others did not.

(21) te-ṣra-t argaz = ahen azergaw?
2S-see:P-2S man = S:ANP grey:EL
‘Have you seen that grey man?’

(22) ḫayt = an ahemraw i ḫayt = an amellul
wall = S:DIST red:EL and wall = S:DIST white:EL
‘That wall is red and that wall is white.’

M:SG F:SG PL
byṭ beyṭ-a buyeṭ ‘white’
kḥel keḥl-a kuḥel ‘black’
ṣeq ṣeq-a xuṣeq ‘raw, green’
zreq zerq-a zureq ‘blue’
hmhr ḥmr-a ḥmher ‘red’
hreq ḥreq-a ḥureq ‘rough’
ṣmek ṣmek-a ṣumeḳ ‘deaf’
sfeṭ ṳfr-a ḫufr ‘yellow’
ṛṭeṭ ṛeṭ-a ṛuṭeṭ ‘soft’

All adjectives of this type have w in second consonant position. In the plural i is inserted between the first and the second consonant (cf. also Moscoso, 2003: 144, who has one example of this type of plural adjective).
9.2.2. Exceptional types

Each of the forms below has only one or two attestations.

**ccu / ccuw-a / ccuw-in**

When a suffix is added to the stem a glide \( w \) is inserted between the stem and the suffix.

<table>
<thead>
<tr>
<th>M:SG</th>
<th>F:SG</th>
<th>PL</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ɛwež</td>
<td>ɛewž-a</td>
<td>ɛiwež</td>
<td>'crooked'</td>
</tr>
<tr>
<td>ḥwel</td>
<td>ḥewl-a</td>
<td>ḥiwel</td>
<td>'crooked'</td>
</tr>
<tr>
<td>ɛweṛ</td>
<td>ɛewṛ-a</td>
<td>ɛiweṛ</td>
<td>'blind'</td>
</tr>
</tbody>
</table>

**cci / cciyy-a / cciyy-in**

When a suffix is added to the stem a glide \( yy \) is inserted between the stem and the suffix.

<table>
<thead>
<tr>
<th>M:SG</th>
<th>F:SG</th>
<th>PL</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ḥlu</td>
<td>ḥluw-a</td>
<td>ḥluw-in</td>
<td>'sweet'</td>
</tr>
</tbody>
</table>

**cC / cC-a / cC-in**

M:SG F:SG PL

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>nqi</td>
<td>nqiyy-a</td>
<td>nqiyy-in</td>
<td>'clean'</td>
</tr>
<tr>
<td>qwi</td>
<td>qwiyy-a</td>
<td>qwiyy-in</td>
<td>'strong'</td>
</tr>
</tbody>
</table>

**cacic / cacic-a / cacic-in**

M:SG F:SG PL

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>xaṭiṛ</td>
<td>xaṭiṛpa</td>
<td>xaṭiṛpin</td>
<td>'dangerous'</td>
</tr>
</tbody>
</table>

A number of adjectives have an ending -i. This suffix is the so-called nisba ending which, in Arabic, makes adjectives out of nouns (cf. III.4.4.). In Ghomara, the derivation of adjectives from nouns by means of the nisba is not productive. A glide \( y \) or \( yy \) is inserted between the i ending and the following suffix. All adjectives of this type have external plurals and no changes in the base.

<table>
<thead>
<tr>
<th>M:SG</th>
<th>F:SG</th>
<th>PL</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>qerqašun-i</td>
<td>qerqašuni-ya</td>
<td>qerqašuniy-in</td>
<td>'multi-colored'</td>
</tr>
<tr>
<td>zelliɣi</td>
<td>zelliɣi-ya</td>
<td>zelliɣiy-in</td>
<td>'bald'</td>
</tr>
</tbody>
</table>
9.2.3. Spanish-type adjectives

There are three borrowings from Spanish which have a masculine singular ending u. The feminine singular has a. Different from other adjectives these adjectives have a gender distinction in the plural. The masculine plural suffix is Spanish -s while the feminine plural suffix is Arabic -t.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ḍubb-u</td>
<td>ḍubb-a</td>
<td>ḍubb-us</td>
<td>ḍubb-at</td>
<td>‘fat’</td>
</tr>
<tr>
<td>gurd-u</td>
<td>gurd-a</td>
<td>gurd-us</td>
<td>gurd-at</td>
<td>‘fat’</td>
</tr>
<tr>
<td>ruby-u</td>
<td>ruby-a</td>
<td>ruby-us</td>
<td>ruby-at</td>
<td>‘blond’</td>
</tr>
</tbody>
</table>

9.2.4. Diminutives of adjectives

A number of adjectives have a diminutive form. The four adjectives with Berber morphology all have diminutive forms, as do some Arabic adjectives. The diminutive adds the meaning of ‘somewhat’ to the adjective. For example, the phrase leewawel mqiqr-et ‘young boys’ refers to children between the age of about 12 to 15 years. There is one exception. The diminutive of the adjective mezzi ‘small’ is mzizu ‘very small’ (the diminutive form loses pharyngealisation).

c1c2c3c4

This is a regular diminutive adjective scheme in Moroccan dialects (Marçais, 1977:148).

These adjectives have one of the base schemes ccc, cac, cic. The second base consonant is reduplicated in this type of diminutive.

<table>
<thead>
<tr>
<th>base</th>
<th>M:SG</th>
<th>F:SG</th>
<th>PL</th>
</tr>
</thead>
<tbody>
<tr>
<td>kḥel</td>
<td>kḥiḥel</td>
<td>kḥiḥl-a</td>
<td>kḥiḥl-in</td>
</tr>
<tr>
<td>qaṣeḥ</td>
<td>qṣiṣeḥ</td>
<td>qṣiṣh-a</td>
<td>qṣiṣh-in</td>
</tr>
<tr>
<td>qaṣir</td>
<td>qṣiṣeṛ</td>
<td>qṣiṣṛ-a</td>
<td>qṣiṣṛ-in</td>
</tr>
<tr>
<td>waseṛ</td>
<td>wsiseṛ</td>
<td>wsisc-a</td>
<td>wsisc-in</td>
</tr>
<tr>
<td>ẓḏeṛ</td>
<td>ẓḍ̱iḍ̱eṛ</td>
<td>ẓḍ̱iḍ̱ṛ-a</td>
<td>ẓḍ̱iḍ̱ṛ-in</td>
</tr>
<tr>
<td>zṛeq</td>
<td>zṛiṛeq</td>
<td>zṛiṛq-a</td>
<td>zṛiṛq-in</td>
</tr>
<tr>
<td>yareq</td>
<td>yṛiṛeq</td>
<td>yṛiṛq-a</td>
<td>yṛiṛq-in</td>
</tr>
<tr>
<td>ylīṭ</td>
<td>ylīlīṭ</td>
<td>ylīlīt-a</td>
<td>ylīlīt-in</td>
</tr>
</tbody>
</table>
Two Berber adjectives have similar patterns. They have a geminate which is split in the diminutive. The adjectival suffixes for the Berber feminine/plural are also used in the diminutive form.

<table>
<thead>
<tr>
<th>base</th>
<th>M:SG</th>
<th>F/PL</th>
<th>‘somewhat big’</th>
</tr>
</thead>
<tbody>
<tr>
<td>meqqur</td>
<td>mqiqer</td>
<td>mqiqr-ет</td>
<td>‘somewhat big’</td>
</tr>
<tr>
<td>mezzzi</td>
<td>mzizu</td>
<td>mzizu-т</td>
<td>‘very small’</td>
</tr>
</tbody>
</table>

cciwc
This scheme is found with adjectives of the structure ccic and cCuc. The adjective mellul ‘white’ has mixed Berber/Arabic affixes. The adjective messus ‘insipid’ takes Berber affixes (cf. III.9.) In the diminutive they both take the Arabic gender and number affixes.

<table>
<thead>
<tr>
<th>base</th>
<th>M:SG</th>
<th>F:SG</th>
<th>PL</th>
</tr>
</thead>
<tbody>
<tr>
<td>mellul</td>
<td>mliwel</td>
<td>mliwl-a</td>
<td>mliwl-in</td>
</tr>
<tr>
<td>messus</td>
<td>msiwes</td>
<td>msiw-a</td>
<td>msiw-in</td>
</tr>
<tr>
<td>ṛqiq</td>
<td>ṛqiweq</td>
<td>ṛqiwa-a</td>
<td>ṛqiwa-in</td>
</tr>
<tr>
<td>qlil</td>
<td>qliwel</td>
<td>qliw-a</td>
<td>qliw-in</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>base</th>
<th>M:SG</th>
<th>F:SG</th>
<th>PL</th>
</tr>
</thead>
<tbody>
<tr>
<td>byeṭ</td>
<td>bwiṣet</td>
<td>bwiṣt-a</td>
<td>bwiṣt-in</td>
</tr>
</tbody>
</table>

9.2.5. The element ‘other’
The element ‘other’ is not an adjective but forms an element on its own. It does not have a relative form nor can it function as a nominal predicate (cf. Lafkioui, 2007: 151 for similar forms in Senhaja de Sraïr). Furthermore, it can function as a head. The following forms exist:

---

<sup>96</sup> This adjective has + ฑ in the feminine singular and -in in the plural which might point to a certain degree of integration in the Arabic morphological system.

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In examples (23) and (24) the use of the element ‘other’ as a noun modifier is shown. In example (25) its use as a head noun is shown.

(23)  lwext  wa-yet
      time  MS-other
     ‘Another time’

(24)  ayetma-s  wi-yet  ma  lla  kayn-in
      siblings-3S  MPL-other  NEG  be  exist-PL
   ‘His other brothers and sisters where not there.’

(25)  ttafa-n  ta-yet
      find:1-3PL  FS-other
   ‘They found the other one (F.)’
10. Participles

10.1. Passive participles

Arabic passive participles are very numerous and widely used in Ghomara Berber. They retain their original morphology in Ghomara Berber. Passive participles are formed by applying a scheme to the abstract root. They are derived from verbs, however, unlike verbs they show the following adjectival/nominal gender and number inflection; ⌀ for masculine singular, -a for feminine singular and -in for the plural (see chapter IV.8.3. and IV.8.4. on the use of participles). They do not inflect for person. Like verbs and adjectives they take the relative form in a subject relative clause. Furthermore, passive participles modify a head noun. These features make passive participles similar to adjectives. However, unlike adjectives they can not function as head nouns (i.e. they can not take the article l-). The morphological forms of passive participles are different as well.

Different from passive participles, active participles have the possibility of taking (verbal) object pronouns, therefore they are treated separately below. The non-derived verb (stem I) is the only stem that makes a morphological distinction between active and passive participles. Transitive stem I verbs have a corresponding active and passive participle, while intransitive stem I verbs only have an active participle. Derived verbs have only one form, the passive participle which can only have a passive interpretation (with initial m-, cf. also Harrell, 1962: 57-59 for participles in Moroccan Arabic). The verbs from which the participle is derived can have Arabic morphology as well as Berber morphology. Berber-morphology verbs that are not borrowed from Arabic have a suppletive relation with participles borrowed from Arabic, for example the verb šš ‘eat’ corresponds to the passive participle mukul ‘having been eaten’ and the active participle wakel ‘having eaten’. Below we present the Aorist form of the verbs with Berber morphology and the 3:SG:M Perfect forms of the verbs with Arabic morphology, followed by the corresponding participles. All attested forms are presented here. Stem IV does not exist in Moroccan Arabic. Stem VII is not attested in our corpus.

10.1.1. Non-derived participles

mccuc

Passive participles of non-derived triliteral verbs have the shape mccuc and in a few cases mccac. Verbs that have cc.cvC shape (doubled verbs) and verbs that have initial w (assimilated verbs) can have these patterns as well. There are no passive participles of hollow verbs in our corpus.

<table>
<thead>
<tr>
<th></th>
<th>M:SG</th>
<th>F:SG</th>
<th>PL</th>
</tr>
</thead>
</table>

97 As mentioned before we use ‘participle’ to mean the Arabic participle.
The following verbs of Berber origin have a suppletive relation to Arabic passive participles:

- *dqen*  
  - mešduḏ  
  - mešduḏ-a  
  - mešduḏ-in  
  - ‘closed’

- *šš*  
  - mukul  
  - mukul-a  
  - mukul-in  
  - ‘eat’

- *ζζζeḡ*  
  - meḥluḇ  
  - meḥluḇ-a  
  - meḥluḇ-in  
  - ‘milk’

In addition to the regular *mccuc* pattern, Ghomara Berber has the following participles with the pattern *mccac*:

<table>
<thead>
<tr>
<th>English</th>
<th>Arabic</th>
<th>Arabic</th>
<th>Arabic</th>
</tr>
</thead>
<tbody>
<tr>
<td>doubt</td>
<td>meškak</td>
<td>meškak-a</td>
<td>meškak-in</td>
</tr>
<tr>
<td>empty water</td>
<td>memyaḥ</td>
<td>memyaḥ-a</td>
<td>memyaḥ-in</td>
</tr>
<tr>
<td>choose</td>
<td>mextaṛ</td>
<td>mextaṛ-a</td>
<td>mextaṛ-in</td>
</tr>
</tbody>
</table>

cf. the following suppletive passive participles:

- *knes*  
  - mešraṛ  
  - mešraṛ-a  
  - mešraṛ-in  
  - ‘fight’

- *znez*  
  - mebyaɛ  
  - mebyaɛ-a  
  - mebyaɛ-in  
  - ‘sell’

**mcci**

This passive participle type is derived from Arabic verbs with the shape *cca* in the Perfective. Some of those verbs change vowel *a* > *i* in the Imperfective. In our corpus only those verbs have a participle of this type. A glide *yy* is inserted between the stem and the suffix in the feminine and the plural.

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Note that this verb from which this participle is derived has Berber morphology. Derived verbs always take Arabic morphology, however, in this case *xṭaṛ* is reinterpreted as a stem I verb. Vicente (2000:95) remarks about this type of verb: ‘el infijo pţp se considera como segunda radical de la raíz y, por lo tanto, se conjugan como un verbo regular en la forma simple’. The verb *ḥtaž* is not reinterpreted in this way and is therefore conjugated in Arabic.
### 10.1.2. Participles of derived forms

Derived verbs have one participle scheme beginning with an **m**-. The different stems are presented below.

**mcCc (stem II)**

<table>
<thead>
<tr>
<th>M:SG</th>
<th>F:SG</th>
<th>PL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>beddel</strong></td>
<td><strong>mbeddel</strong></td>
<td><strong>mbeddl-a</strong></td>
</tr>
<tr>
<td><strong>berreq</strong></td>
<td><strong>mberreq</strong></td>
<td><strong>mberrq-a</strong></td>
</tr>
<tr>
<td><strong>debbey</strong></td>
<td><strong>mdebbey</strong></td>
<td><strong>mdebb-y-a</strong></td>
</tr>
<tr>
<td><strong>ḍehheṛ</strong></td>
<td><strong>mḍehheṛ</strong></td>
<td><strong>mḍehhṛ-a</strong></td>
</tr>
<tr>
<td><strong>felleq</strong></td>
<td><strong>mfelleq</strong></td>
<td><strong>mfellq-a</strong></td>
</tr>
<tr>
<td><strong>melleḥ</strong></td>
<td><strong>mmelleḥ</strong></td>
<td><strong>mnellh-a</strong></td>
</tr>
<tr>
<td><strong>heddeḏ</strong></td>
<td><strong>mheddeḏ</strong></td>
<td><strong>mhedḍ-a</strong></td>
</tr>
<tr>
<td><strong>ḥeddeḏ</strong></td>
<td><strong>mḥeddeḏ</strong></td>
<td><strong>mḥedḍ-a</strong></td>
</tr>
<tr>
<td><strong>bey yeṭ</strong></td>
<td><strong>mbeyyeṭ</strong></td>
<td><strong>mbeyy-ṭ-a</strong></td>
</tr>
<tr>
<td><strong>beyyen</strong></td>
<td><strong>mbeyyen</strong></td>
<td><strong>mbeyyn-a</strong></td>
</tr>
<tr>
<td><strong>wesseɛ</strong></td>
<td><strong>mwesseɛ</strong></td>
<td><strong>mwesse-a</strong></td>
</tr>
</tbody>
</table>

There is one passive participle in our corpus which does not have a corresponding verb:

<table>
<thead>
<tr>
<th>M:SG</th>
<th>F:SG</th>
<th>PL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>mdexxem</strong></td>
<td><strong>mdexx-a</strong></td>
<td><strong>mdexx-in</strong></td>
</tr>
</tbody>
</table>

**mcCi (defective)**

The vowel **i** becomes glide **y** when the feminine suffix **a** follows. The plural form never has a glide, instead **i** is deleted before suffix **-in**.
<table>
<thead>
<tr>
<th>M:SG</th>
<th>F:SG</th>
<th>PL</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>ibekka</td>
<td>mbekki</td>
<td>mbekk-in</td>
<td>‘make cry’</td>
</tr>
<tr>
<td>feḍḍa</td>
<td>mfefḍḍi</td>
<td>mfefḍḍ-in</td>
<td>‘finish’</td>
</tr>
<tr>
<td>lewwi</td>
<td>mlewwi</td>
<td>mleww-in</td>
<td>‘spin, roll’</td>
</tr>
<tr>
<td>medḍi</td>
<td>mmmedḍi</td>
<td>mmmedḍ-in</td>
<td>‘sharpen’</td>
</tr>
<tr>
<td>neqqi</td>
<td>mneqqi</td>
<td>mneqq-in</td>
<td>‘clean’</td>
</tr>
<tr>
<td>qerṛi</td>
<td>mqerṛi</td>
<td>mqerṛ-in</td>
<td>‘teach’</td>
</tr>
</tbody>
</table>

**mcacc (stem III)**

<table>
<thead>
<tr>
<th>M:SG</th>
<th>F:SG</th>
<th>PL</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>sameḥ</td>
<td>msameḥ</td>
<td>msamḥ-in</td>
<td>‘forgive’</td>
</tr>
<tr>
<td>ḥaṛeḇ</td>
<td>mḥaṛeḇ</td>
<td>mḥaṛb-in</td>
<td>‘wage war’</td>
</tr>
<tr>
<td>gadd</td>
<td>mgadded</td>
<td>mgadd-in</td>
<td>‘flat, flatten’</td>
</tr>
<tr>
<td>eafer</td>
<td>meafer</td>
<td>meafr-in</td>
<td>‘try’</td>
</tr>
<tr>
<td>eaqeb</td>
<td>meaqeb</td>
<td>meaqb-in</td>
<td>‘punish’</td>
</tr>
<tr>
<td>elawed</td>
<td>melawed</td>
<td>meawd-in</td>
<td>‘tell’</td>
</tr>
<tr>
<td>elared</td>
<td>meelared</td>
<td>meard-in</td>
<td>‘invite’</td>
</tr>
</tbody>
</table>

There is one Berber-morphology verb with Berber etymology that can form a passive participle:

<table>
<thead>
<tr>
<th>M:SG</th>
<th>F:SG</th>
<th>PL</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>aḡem d ~ daḡem</td>
<td>mdaḡem</td>
<td>mdaḡem-a</td>
<td>mdaḡem-in</td>
</tr>
</tbody>
</table>

**mcaci (defective)**

<table>
<thead>
<tr>
<th>M:SG</th>
<th>F:SG</th>
<th>PL</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>ḡazi</td>
<td>mḡazi</td>
<td>mḡaly-a</td>
<td>mḡal-in</td>
</tr>
<tr>
<td>ḥaḍi</td>
<td>mḥaḍi</td>
<td>mḥady-a</td>
<td>mḥad-in</td>
</tr>
</tbody>
</table>

**mcawc (hollow)**

<table>
<thead>
<tr>
<th>M:SG</th>
<th>F:SG</th>
<th>PL</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>sawem</td>
<td>msawem</td>
<td>msawem-a</td>
<td>msawem-in</td>
</tr>
<tr>
<td>elawed</td>
<td>melawed</td>
<td>meawed-a</td>
<td>meawed-in</td>
</tr>
</tbody>
</table>

---

99 The ss- derived form ss-etru co-exists with this form.
100 Vicente (2000: 88) does not have any examples of geminated, assimilated, hollow with radical y, or hollow verbs in this form (stem III). In Ghomara we have found some examples of hollow verbs.
101 The variant meerṛuḍ̱ exists as well.
mtcc (stem V)
Passive participles of this type are very rare. Only the following examples occur in our corpus:

<table>
<thead>
<tr>
<th></th>
<th>M:SG</th>
<th>F:SG</th>
<th>PL</th>
</tr>
</thead>
<tbody>
<tr>
<td>tweqqef</td>
<td>metweqqef</td>
<td>metweqqf-a</td>
<td>metweqqf-in</td>
</tr>
<tr>
<td>thēššem</td>
<td>metheššem</td>
<td>metheššm-a</td>
<td>metheššm-in</td>
</tr>
</tbody>
</table>

mtcacc (stem VI)
The passive participles of stem VI attested in our corpus are given below.

<table>
<thead>
<tr>
<th></th>
<th>M:SG</th>
<th>F:SG</th>
<th>PL</th>
</tr>
</thead>
<tbody>
<tr>
<td>ttafeq</td>
<td>mettafeq</td>
<td>mettafq-a</td>
<td>mettafq-in</td>
</tr>
<tr>
<td>teaqeb</td>
<td>meteaqeb</td>
<td>meteaq-f-a</td>
<td>meteaq-f-in</td>
</tr>
<tr>
<td>tsameḥ</td>
<td>metsameḥ</td>
<td>metsamḥ-a</td>
<td>metsamḥ-in</td>
</tr>
<tr>
<td>tsara</td>
<td>metsari</td>
<td>metsary-a</td>
<td>metsar-in</td>
</tr>
<tr>
<td>tlaqa</td>
<td>metlaqi</td>
<td>metlaq-y-a</td>
<td>metlaq-in</td>
</tr>
<tr>
<td>tqadd</td>
<td>metqadd</td>
<td>metqadd-a</td>
<td>metqadd-in</td>
</tr>
<tr>
<td>tfakk</td>
<td>metfakk</td>
<td>metfakk-a</td>
<td>metfakk-in</td>
</tr>
</tbody>
</table>

mctcc ~ mctacc (stem VIII)
There are only sound forms of these passive participles in our corpus.

<table>
<thead>
<tr>
<th></th>
<th>M:SG</th>
<th>F:SG</th>
<th>PL</th>
</tr>
</thead>
<tbody>
<tr>
<td>ktašef</td>
<td>mektašef</td>
<td>mektaš-f-a</td>
<td>mektaš-f-in</td>
</tr>
<tr>
<td>ɛṭaṛef</td>
<td>meɛṭaṛef</td>
<td>meɛṭaṛ-f-a</td>
<td>meɛṭaṛ-f-in</td>
</tr>
<tr>
<td>štaweṛ</td>
<td>mestaweṛ</td>
<td>mestaweṛ-p-a</td>
<td>mestaweṛ-in</td>
</tr>
<tr>
<td>ḫtařem</td>
<td>meḥtařem</td>
<td>meḥtaṛm-a</td>
<td>meḥtaṛm-in</td>
</tr>
<tr>
<td>rtɛeḇ</td>
<td>mertɛeḇ</td>
<td>mertɛeḇ-p-a</td>
<td>mertɛeḇ-in</td>
</tr>
<tr>
<td>ḫtaž</td>
<td>meḥtaž</td>
<td>meḥtaž-a</td>
<td>meḥtaž-in</td>
</tr>
</tbody>
</table>

mstccc (stem X)

<table>
<thead>
<tr>
<th></th>
<th>M:SG</th>
<th>F:SG</th>
<th>PL</th>
</tr>
</thead>
<tbody>
<tr>
<td>stecžeb</td>
<td>mestecžeb</td>
<td>mestečž-b-a</td>
<td>mestečž-b-in</td>
</tr>
<tr>
<td>stanes</td>
<td>mestanes</td>
<td>mestanes-a</td>
<td>mestanes-in</td>
</tr>
</tbody>
</table>

10.1.3. Quadriliteral verbs

mccc
Participles derived from quadriliteral verbs are well-represented. They always have a passive interpretation. For example:
The following participles have irregular schemes. The passive participle *maẓuẓi* does not have a feminine or plural form.

<table>
<thead>
<tr>
<th>M:SG</th>
<th>F:SG</th>
<th>PL</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>ġheḏ</td>
<td>meġheḏ</td>
<td>mġehd-a</td>
<td>mġehd-in</td>
</tr>
<tr>
<td>-</td>
<td>muxliṣ</td>
<td>muxliṣ-a</td>
<td>muxliṣ-in</td>
</tr>
<tr>
<td>ziwen</td>
<td>mziwen</td>
<td>mziwn-a</td>
<td>mziwn-in</td>
</tr>
<tr>
<td>neẓẓeẓ</td>
<td>maẓuẓi</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>-</td>
<td>mezgawger</td>
<td>mezgawger-a</td>
<td>mezgawgr-in</td>
</tr>
<tr>
<td>-</td>
<td>mmerr</td>
<td>mmerr-a</td>
<td>mmerr-in</td>
</tr>
</tbody>
</table>

10.2. The active participle

Active participles share their defining features with passive participles (and adjectives), and in addition can take object suffixes. As this feature sets them apart from passive participles, we treat them separately (cf. IV.8.3. aspect for their syntactic behavior).

The non-derived verb (stem I) is the only stem that has corresponding active and passive participles. Transitive stem I verbs have a corresponding active and passive participle. Intransitive stem I verbs have only an active participle. Other verb stems only have a corresponding passive participle.

Active participles are borrowed from Arabic and have Arabic morphology. The verbs from which the participle is derived can have Arabic morphology as well as Berber
morphology. Berber-morphology verbs which are not borrowed from Arabic have a
suppletive relation with the participles, for example the (intransitive) verb ṭṭeṣ ‘sleep’
corresponds to the active participle naɛes ‘asleep’. There exist four basic schemes of active
participles. In one scheme the suffix -an is added to the verb root. Below we present the
Aorist of the verbs with Berber morphology and the Perfect of the verbs with Arabic
morphology followed by the corresponding active participles.

Most active participles are derived from sound ccc verbs. Triliteral verbs with initial
w (assimilated verbs) also occur in this group. A number of participles which have y as their
middle consonant are derived from cvc verbs (hollow verbs). When a suffix is added to the
masculine singular scheme, schwa in the preceding syllable is deleted.

cacc

<table>
<thead>
<tr>
<th>M:SG</th>
<th>F:SG</th>
<th>PL</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>bred</td>
<td>bareḏ</td>
<td>bard-a</td>
<td>bard-in</td>
</tr>
<tr>
<td>ḵmel</td>
<td>kamel</td>
<td>kaml-a</td>
<td>kaml-in</td>
</tr>
<tr>
<td>kṛeh</td>
<td>kaṛeh</td>
<td>kaṛh-a</td>
<td>kaṛh-in</td>
</tr>
<tr>
<td>mles</td>
<td>males</td>
<td>mals-a</td>
<td>mals-in</td>
</tr>
<tr>
<td>mleḥ</td>
<td>maleḥ</td>
<td>malḥ-a</td>
<td>malḥ-in</td>
</tr>
<tr>
<td>ban</td>
<td>bayen</td>
<td>bayn-a</td>
<td>bayn-in</td>
</tr>
<tr>
<td>fiq</td>
<td>fayeq</td>
<td>fayq-a</td>
<td>fayq-in</td>
</tr>
<tr>
<td>eṭś</td>
<td>eayeš</td>
<td>eayš-a</td>
<td>eayš-in</td>
</tr>
<tr>
<td>ḡas</td>
<td>ḡayes</td>
<td>ḡays-a</td>
<td>ḡays-in</td>
</tr>
<tr>
<td>ṣum ~ ẓum</td>
<td>ṣayem</td>
<td>ṣaym-a</td>
<td>ṣaym-in</td>
</tr>
<tr>
<td>wsee</td>
<td>waseč</td>
<td>wase-a</td>
<td>wase-in</td>
</tr>
</tbody>
</table>

The active participle kayen in different from other active participles in that it functions as
an existential (cf. IV.2.8.5. non-verbal predicate, furthermore the related element ḫun is
used in counterfactuals, cf. IV.4.2.4.).

- kayen   kayn-a   kayn-in   ‘exist’

Suppletive participles

<table>
<thead>
<tr>
<th>M:SG</th>
<th>F:SG</th>
<th>PL</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>qqim</td>
<td>gales</td>
<td>gals-a</td>
<td>gals-in</td>
</tr>
<tr>
<td>šš</td>
<td>wakel</td>
<td>wakl-a</td>
<td>wakl-in</td>
</tr>
<tr>
<td>ṭṭeṣ</td>
<td>naɛes</td>
<td>naɛs-a</td>
<td>naɛs-in</td>
</tr>
<tr>
<td>ḅdeḏ</td>
<td>waqef</td>
<td>waqf-a</td>
<td>waqf-in</td>
</tr>
</tbody>
</table>
caci (defective verbs)
The final i can be assimilated or become a glide y when followed by the plural marker -in.

<table>
<thead>
<tr>
<th>verb</th>
<th>M:SG</th>
<th>F:SG</th>
<th>PL</th>
</tr>
</thead>
<tbody>
<tr>
<td>kra - ikri</td>
<td>kari</td>
<td>kary-a</td>
<td>kar(y)-in</td>
</tr>
<tr>
<td>maḍi</td>
<td>maḍi</td>
<td>maḍy-a</td>
<td>maḍ(y)-in</td>
</tr>
<tr>
<td>qra - iqra</td>
<td>qari</td>
<td>qary-a</td>
<td>qar(y)-in</td>
</tr>
</tbody>
</table>

Suppletive participles

<table>
<thead>
<tr>
<th>verb</th>
<th>M:SG</th>
<th>F:SG</th>
<th>PL</th>
</tr>
</thead>
<tbody>
<tr>
<td>ttu</td>
<td>nasi</td>
<td>nasy-a</td>
<td>nasy-in</td>
</tr>
<tr>
<td>ddu</td>
<td>maši</td>
<td>mašš-a</td>
<td>maš(y)-in</td>
</tr>
<tr>
<td>ddu d</td>
<td>maši</td>
<td>maš-a</td>
<td>mažy-in</td>
</tr>
</tbody>
</table>

cc cán

<table>
<thead>
<tr>
<th>verb</th>
<th>M:SG</th>
<th>F:SG</th>
<th>PL</th>
</tr>
</thead>
<tbody>
<tr>
<td>ḥzen</td>
<td>ḥeznan</td>
<td>ḥeznan-a</td>
<td>ḥeznan-in</td>
</tr>
<tr>
<td>yḍeh</td>
<td>yedḥan</td>
<td>yedḥ-an-a</td>
<td>yedḥ-an-in</td>
</tr>
<tr>
<td>zeef</td>
<td>zeefan</td>
<td>zeefan-a</td>
<td>zeefan-in</td>
</tr>
<tr>
<td>sker</td>
<td>sekran</td>
<td>sekran-a</td>
<td>sekran-in</td>
</tr>
<tr>
<td>freḥ</td>
<td>ferḥan</td>
<td>ferḥ-an-a</td>
<td>ferḥ-an-in</td>
</tr>
<tr>
<td>ɛgez</td>
<td>ɛegzan</td>
<td>ɛegzan-a</td>
<td>ɛegzan-in</td>
</tr>
</tbody>
</table>

There is one adjective of this type which has an optional u after the first consonant.

<table>
<thead>
<tr>
<th>M:SG</th>
<th>F:SG</th>
<th>PL</th>
</tr>
</thead>
<tbody>
<tr>
<td>---</td>
<td>euler-an</td>
<td>euler-an-a</td>
</tr>
</tbody>
</table>

cCac

There is one active participles of this type in our corpus.

<table>
<thead>
<tr>
<th>verb</th>
<th>M:SG</th>
<th>F:SG</th>
<th>PL</th>
</tr>
</thead>
<tbody>
<tr>
<td>xdem</td>
<td>xeddam</td>
<td>xeddam-a</td>
<td>xeddam-in</td>
</tr>
</tbody>
</table>
There is one active participle that combines gemination and the -an suffix.

<table>
<thead>
<tr>
<th></th>
<th>M:SG</th>
<th>F:SG</th>
<th>PL</th>
</tr>
</thead>
<tbody>
<tr>
<td>eya</td>
<td>eyyan</td>
<td>eyyan-a</td>
<td>eyyan-in</td>
</tr>
</tbody>
</table>

‘tired’
11. Pronouns
There are Berber pronouns and (borrowed) Arabic pronouns. Berber pronouns are subdivided into independent pronouns, direct object pronouns, indirect object pronouns and adnominal suffixes. Arabic suffix pronouns are borrowed together with the Arabic verb and some prepositions (cf. III.13.5. prepositions). Arabic nouns are generally not taken over with their pronominal suffixes, though a few exceptions exist.

The Berber pronouns will be presented first. After the independent pronouns the different forms of the Berber direct object and indirect object pronouns will be discussed. Adnominal suffixes which only apply to a limited set of kinship nouns, will then be presented. After this, the Arabic pronouns that are used in Ghomara Berber are discussed. In the final section demonstrative pronouns and deictic clitics are discussed.

11.1. Independent pronouns
Independent pronouns express person, number and gender. There are three persons (first, second and third), two numbers (singular and plural) and two genders (masculine and feminine) which are only expressed in the second and third person singular. First and second person singular forms have a number of variants which are in free variation.

1:SG  nekk ~ nekki ~ nekkin ~ nekkinet
2:M:SG  kežž ~ keği ~ keğin ~ keğinet
2:F:SG  kemm ~ kemmi ~ kemmin ~ kemminet
3:M:SG  netta
3:F:SG  nettaña
1:PL  nuḵna
2:PL  kunna
3:PL  nihma

Arabic third person pronouns can optionally follow the presentative particle ha. Berber pronouns can be used in this context as well.

3:M:SG  ha huwwa
3:F:SG  ha heyya
3:PL  ha hum

103 At the end of a word ḡ can become ẓẓ (cf. II.1.3.).
104 El Hannouche (2010: 113) gives the form niḵma for the dialect of Amṭiqan, and niḵnam in Beni Menṣur for third person plural. This author also remarks that there is sometimes debuccalisation of ḵ which becomes ḥ in the first and third person plural. We have not encountered the same phenomenon in the variety described here.
11.2. Clitic pronouns

Direct object pronouns, indirect object pronouns and the deictic clitic d / id together form a complex which forms an integral part with the verb (cf. Kossmann 2012: 50). These clitics constitute the clitic complex. Depending on the syntactic context the clitic complex can precede and follow the verb. The clitics can have different forms depending on their position regarding the verb. In this section the morphology of the direct object and the indirect object pronouns will be presented. Examples from texts will be given to illustrate the use of the pronouns. The syntax of the clitic complex will be treated in IV.3.3.

11.2.1. Direct object pronouns

Direct object pronouns express person, number and gender. Gender is only distinguished in the singular. There are three paradigms in total; two post-verbal paradigms and one pre-verbal paradigm.

Preverbal direct object pronouns appear in syntactic contexts which always involve a preceding particle that ends in a. It is therefore impossible to determine which a is elided. We have chosen to represent the preverbal pronouns without the a vowel. Other differences between the direct object sets will be discussed below.

<table>
<thead>
<tr>
<th></th>
<th>Post-verbal 1</th>
<th>Post-verbal 2</th>
<th>Pre-verbal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:SG</td>
<td>ay</td>
<td>ay</td>
<td>y ~ t (yṯ)</td>
</tr>
<tr>
<td>2:M:SG</td>
<td>ak</td>
<td>ak</td>
<td>k</td>
</tr>
<tr>
<td>2:F:SG</td>
<td>am</td>
<td>am</td>
<td>m</td>
</tr>
<tr>
<td>3:M:SG</td>
<td>at / ah</td>
<td>t</td>
<td>y ~ t</td>
</tr>
<tr>
<td>3:F:SG</td>
<td>at / ah</td>
<td>t ~ tet ~ teṯ</td>
<td>t</td>
</tr>
<tr>
<td>1:PL</td>
<td>anax</td>
<td>anax</td>
<td>yen</td>
</tr>
<tr>
<td>2:PL</td>
<td>awen</td>
<td>awen</td>
<td>wen</td>
</tr>
<tr>
<td>3:PL</td>
<td>ahen</td>
<td>ten</td>
<td>n</td>
</tr>
</tbody>
</table>

105 In many other Berber languages prepositions and other elements also form part of the clitic complex (cf. Dell & Elmdelaoui, 1989). In Ghomara Berber prepositions fall outside of the realm of the clitic complex and therefore never change position in attraction contexts.

106 The variant yṯ is put between brackets as it is not the common form in Iɛṛaḥen. It is encountered once in our text corpus. In Amṭiqan there is a distinction when the pronouns occur in this position (El Hannouche, 2010: 116). The third person pronoun is ṭ, like in Iɛṛaḥen, whereas the first person has form yṯ. ˁa yṯ izzwỉخت thus only means ‘He will miss me’. The speakers in Iɛṛaḥen recognise this form. It appears in the Colin texts as well (1929: 54).
11.2.1.1. Postverbal direct object pronouns

1. There are two types of post-verbal paradigms. The third person (masculine and feminine) singular and plural of the paradigms are different. Type one is used after verbs without a suffix, while type two is used after a verbal suffix or the indirect object pronoun. In the following two paradigms the third person singular of the verb šebbṛ ‘grab’ does not have a suffix whereas the third person plural has a suffix. The third person differs in these contexts. The third person feminine singular form \( t \) appears after indirect object pronouns (see example (4) below).

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>( i)-šebbṛ = ay</td>
<td>( i)-šebbṛ = aḵ</td>
<td>( i)-šebbṛ = am</td>
<td>( i)-šebbṛ = at</td>
<td>( i)-šebbṛ = am</td>
<td>( i)-šebbṛ = anax</td>
<td>( i)-šebbṛ = awen</td>
<td>( i)-šebbṛ = ahen</td>
</tr>
</tbody>
</table>

The third person feminine singular pronoun of the second type has the forms \( t \) / \( tet \sim tet \). The forms \( tet \) and \( tet \) are in free variation as shown by examples (2) and (3). The form \( t \) follows an indirect object pronoun as shown in example (4). However, in the same position \( tet \sim tet \) can appear, as shown in examples (5) and (6). In the third person plural pronoun there is a difference between type 1 \( ahen \) and type 2 \( ten \). Type 1 is used after a verb that

\[ 107 \]

\[ 108 \]
does not end in a suffix. Type 2 appears after a verbal suffix and after an indirect object pronoun. Example (7) shows type 1 pronoun, examples (8) and (9) show type 2.

(2)  qeddḏ-en = tet,  mmṛ-en = tet
    cut:P-3PL = 3FS:DO  send:P-3PL = 3FS:DO
    ‘They cut her into pieces and sent her.’

(3)  i  lɛeṭṭa   tseyyab-en = teṯ
    and  piece.of.bread  throw:I-3PL = 3FS:DO
    ‘and the chunk of bread, they throw it away’

(4)  mašī   id  izref i   netta  i-tett  tayʷlalt = ahen.
    go:AP:MS  with  road and  he  3MS-eat:I  bissara:EL = S:ANP
    i-tqetṭaṛ=as=t  x  umeẓẓuḡ  nn-es
    3MS-drip:I = 3S:IO = 3FS:DO  on  ear:EA of 3S
    ‘Walking down the road he eats the bissara. He drops it on his ear.’

(5)  te-fk = as = tet
    3FS-give:P = 3S:IO = 3FS:DO
    ‘She gave it (F) to him.’

(6)  ttf-an = as = teṯ
    3FS-grab:P = 3S:IO = 3FS:DO
    ‘They grabbed her for him.’

(7)  ma  h-uf = ahen   Ši
    NEG  3FS-find:P = 3PL:DO  NEG
    ‘She did not find them.’

(8)  qleb  x  ṭṭhar  nn-ek  te-ḡḡ-et = ten
    turn:IMP  on  back  of 2S  2S-do:A-2S = 3PL:DO
    ‘Turn on your back and release them.’ (lit. do them)

(9)  i-qqn = as = ten  i  ueebbiz = ahen
    3MS-tie:P = 3S:IO = 3PL:DO  to  bull:EA = S:ANP
    ‘He tied them to that cow.’

In the third person type 1 distinguishes the masculine variants at / ah and the feminine variants at / ah. The variant ah appears when it follows a verb not ending in a suffix and
preceding the deictic particle **d** (after a feminine pronoun) / **id** (after a masculine pronoun), for example:

(10)  
\[ i \- \text{šebbe} \quad ya \quad \text{tsekkurt}, \quad sa\text{æ}a \quad i\-bb\equiv ah\equiv d \]

3MS-catch:P one:F partridge:EA then 3MS-take:P = 3FS:DO = DC

\[ dar \quad \text{uxyam} \]
to house:EA

‘He caught a partridge, then he brought it home.’

(11)  
\[ bb\equiv ah\equiv idl! \]
take:IMP = 3MS:DO = DC

‘bring him (here)!’

### 11.2.1.2. Preverbal direct object pronouns

There is one paradigm of preverbal direct object pronouns. At one point, the preverbal forms are somewhat complicated, viz. the difference between the first and third person singular pronouns, which are almost identical. Both pronouns have the form **y** in preverbal position, except before third person singular masculine verbs and the relative form, where they both have **t**. The two pronouns are different, however, when preceding a third person plural verb. In this position the first person pronoun is **t** while the third person pronoun is **y**. This is summarised in the following table. The person, number and gender on the left represent the verbal form which the pronoun precedes:

<table>
<thead>
<tr>
<th></th>
<th>1:M:SG</th>
<th>3:M:SG</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:SG</td>
<td>-</td>
<td><strong>y</strong></td>
</tr>
<tr>
<td>2:SG</td>
<td><strong>y</strong></td>
<td><strong>y</strong></td>
</tr>
<tr>
<td>3:M:SG</td>
<td><strong>t</strong></td>
<td><strong>t</strong></td>
</tr>
<tr>
<td>3:F:SG</td>
<td><strong>y</strong></td>
<td><strong>y</strong></td>
</tr>
<tr>
<td>1:PL</td>
<td>-</td>
<td><strong>y</strong></td>
</tr>
<tr>
<td>2:PL</td>
<td><strong>y</strong></td>
<td><strong>y</strong></td>
</tr>
<tr>
<td>3:PL</td>
<td><strong>t</strong></td>
<td><strong>y</strong></td>
</tr>
</tbody>
</table>

In the following examples, the forms are only given separately when the forms differ. Note that the variants are not due to phonological conditioning; cf. for example the verbs *ẓẓwiṯ* ‘miss’ without initial vowel and *uf* ‘find’ with initial vowel. First person and third person direct object pronouns precede the verb:
The same forms appear when the pronouns appear before a verb that has an initial vowel. Compare the following examples.

1:SG  š a y ẓẓwiṯax  ‘I will miss him’
2:SG  š a y teẓẓwiṯet  ‘You will miss him/ me’
3:M:SG ṣ a ṯ izẓwiṯ  ‘He will miss him/ me’
3:F:SG  š a y teẓẓwiṯ  ‘She will miss him/ me’
1:PL  š a y neẓẓwiṯ  ‘We will miss him’
2:PL  š a y teẓẓwiṯem  ‘You will miss him/ me’
3:PL  š a y ẓẓwiṯen  ‘They will miss him’
3:PL  š a ṯ ẓẓwiṯen  ‘They will miss me’

In the examples below, we will show the use of the pronouns in texts. Example (12) shows the preverbal form y with third person reference preceding a first person plural verb. The second verb shows the same pronoun in post-verbal position.

(12) ne-ttutu a y=n-zed g rrḥa, rrḥa n ufus,
     1PL-go:I AD 3MS:DO=1PL-grind:A in mill, mill of hand:EA
     hamka, ne-ẓzad=at.....
     like.this 1PL-grind:I=3MS:DO
     ‘We go and grind it in the mill, a hand mill, like this, we grind it…’

It is unexpected to find this difference only before a third person plural verb and not before any other verb form. A reason for this could be the lack of a prefix in third person plural verbal conjugation. The only other verbal conjugation which does not have a prefix is the first person. However, it is impossible to test the difference as for obvious reasons the first person direct object pronoun can not combine with a verb in the first person. A reflexive construction is used in that case (cf. III.11.6. for reflexive constructions). In Ṭmṭiqan the pronoun yṯ would be used here.

In the variant of Ṭmṭiqan ‘He will find me.’ is ʂ a yṯ yuf (elicitation in Bou Ahmed).
In the variant of Ṭmṭiqan ‘They will find me.’ is ʂ a yṯ ufun (elicitation in Bou Ahmed).
In the next example the pronoun refers to a rooster which was mentioned before in the discourse. The example illustrates that the third person form y is used before a third person plural verb while the variant ţ is used preceding third person masculine singular verbs.

(13) wella a weḵl-en ga-s iyežden a y = ţežt-en
or AD step:A-3PL in:3:MS billy.goats AD 3MS:DO = hurt:A-3PL
wella a ţ = ye-wweṭ ayišd iši
or AD 3MS:DO = 3MS-hit:A billy.goat:EL some
‘Or the billy goats would trample on it, they would hurt it or a billy goat would hit it.’

In the following text excerpts the difference between the first person singular and third person singular pronoun is shown. In both examples the third person plural verbal form of ʂʂ ‘eat’ is used. In example (14a) the third person pronoun is used whereas in (14b) the first person pronoun is used.

(14a) lmuhim, aherrey tşeyyer s ibżaแดน nn-es.
anyway sheep:EL PASS:tight:PF:3MS with urine of:3:M
š i-eiq-u iš-es š a y = šš-en....
FUT IMPF:3PL-be.aware-IMPF:3PL with:3:M FUT AD 3MS:DO = eat:A-3PL
‘Anyway, the sheep had to urinate. They would become aware of him, they would eat him.’

(14b) i-nn = as: ‘mki ne-dda ḥetta tferreq-na, š
3MS-said:P = 3S:IO if 1PL-go:P until PASS:separate-1PL:PF FUT
i-ciss-u = li ağḍi ulla nnmer ulla kḍa,
3PL:IMPF-guard-3PL:IMPF = 1PL:IO jackal:EL or leopard or something š a ţ = šš-en.’
FUT AD 1S:DO = eat:A-3PL
‘He said: ‘If we would split up, the jackal or the leopard or so would keep an eye on me and they would eat me.’

There are two other pronouns that differ from postverbal pronouns (except for the a): first person plural ɣen and third person plural n, e.g:

(15) nhar = ad ſ a ɣen = i-ney ḩaba nn-em
day = s:PRX FUT AD 1PL:DO = 3MS-kill:A father of:2FS
‘Today your father is going to kill us.’
(16)  i  lyula = yahen  š  a  n = te-šš.
     and  ogress = S:ANP  FUT  AD  3PL:DO = 3FS:eat:A
     ‘And the ogress is going to eat them.’

Example (17) illustrates the use of a third/first person singular pronoun ţ before the participle. The referent can only be inferred from the context.

(17)  šk  a  ţ  i-ẓẓwit-en?
     who  REL  3/1MS:DO  RC-miss:P-RC
     ‘Who misses me/him?’

11.2.2. Indirect object pronouns

Indirect object pronouns only differ from direct object pronouns in the third person singular and plural. There is no gender distinction in the third person singular.

<table>
<thead>
<tr>
<th></th>
<th>post-verbal</th>
<th>pre-verbal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:SG</td>
<td>ay</td>
<td>y ~ ţ²¹²</td>
</tr>
<tr>
<td>2:M:SG</td>
<td>ak</td>
<td>k</td>
</tr>
<tr>
<td>2:F:SG</td>
<td>am</td>
<td>m</td>
</tr>
<tr>
<td>3:SG</td>
<td>as</td>
<td>s</td>
</tr>
<tr>
<td>1:PL</td>
<td>anax</td>
<td>yen</td>
</tr>
<tr>
<td>2:PL</td>
<td>awen</td>
<td>wen</td>
</tr>
<tr>
<td>3:PL</td>
<td>asen</td>
<td>sen</td>
</tr>
</tbody>
</table>

Like the direct object pronoun the first person indirect object pronoun in preverbal position has two forms. The form y is used with second person, third person feminine and second person plural verbs. The variant ţ is used before third person masculine singular and third person plural verbs, e.g.:

2:M:SG        š a y tcaw�d tax*raft  ‘You will tell me a story’
3:M:SG        š a ţ icaw�d tax*raft  ‘He will tell me a story’
3:F:SG        š a ţ tcaw�d tax*raft  ‘She will tell me a story’

2:PL          š a y tcaw�em tax*raft  ‘You will tell me a story’
3:PL          š a ţ ecaw�en tax*raft  ‘They will tell me a story’

¹² Just like the direct object pronoun the variant yṭ is used in Ḍmṭiqan (cf. El Hannouche, 2010: 116, 118).
Speakers from Ḍmṭiqan consulted in Bou Ahmed confirmed this variant to me.
However, the first person singular indirect object pronoun always has the form *y when it precedes the direct object pronoun, for example:

(18) $ \sigma$ $a$ $y = d = i \text{-} rry = ah = d$ (i nekkin)$^{113}$
    FUT AD 1S:IO = 3MS:DO:DC = 3MS-return:A = 3MS:DO = DC (to me)
    'He will return it to me.'

(19) *$\sigma$ $a$ $t = d = i \text{-} rry = ah = d$ (i nekkin)
    FUT AD 1S:IO = 3MS:DO:DC = 3MS-return:A = 3MS:DO = DC (to me)
    'You will return it to me.'

11.3. Prepositional suffixes

Most simple prepositions take prepositional suffixes (cf. III.12. for prepositions). Prepositional complexes do not take suffixes but are followed by a construction with the genitive preposition $n$ (once by $i$) ‘of’. The pronominal suffixes have slightly different forms with consonant-final and with vowel-final prepositions. This is to do with syllable structure. Below we present the pronominal paradigm of two prepositions, one ending in a consonant, the other in a vowel.

<table>
<thead>
<tr>
<th></th>
<th>$fsir$ ‘behind’</th>
<th>$g$ ‘in’</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:SG</td>
<td>-i $\sim$ -y</td>
<td>$fsir$-i ‘behind me’</td>
</tr>
<tr>
<td>2:M:SG</td>
<td>-k</td>
<td>$fsir$-ek ‘behind you (M)’</td>
</tr>
<tr>
<td>2:F:SG</td>
<td>-m</td>
<td>$fsir$-em ‘behind you (F)’</td>
</tr>
<tr>
<td>3:SG</td>
<td>-s</td>
<td>$fsir$-es ‘behind him/her’</td>
</tr>
<tr>
<td>1:PL</td>
<td>-nax</td>
<td>$fsir$-nax ‘behind us’</td>
</tr>
<tr>
<td>2:PL</td>
<td>-un $\sim$ -wen</td>
<td>$fsir$-un ‘behind you (PL)’</td>
</tr>
<tr>
<td>3:PL</td>
<td>-sen</td>
<td>$fsir$-sen ‘behind them’</td>
</tr>
</tbody>
</table>

11.4. Adnominal suffixes

A limited number of kinship nouns express possession by adding an adnominal suffix to the singular noun. This is the case of the nouns $km\text{a}$ ‘brother’, $ule\text{tma}$ ‘sister’ and $aye\text{tma}$ ‘brothers and sisters$^{114}$. The first person singular uses the form without a suffix. Plural possession with these nouns is expressed by the genitive preposition plus a pronominal

---

$^{113}$ See IV.3.3.5. for doubling of the deictic clitic $d$ and II.3.1. for assimilation of preverbal $t > d$.

$^{114}$ In many Berber languages there is a complete paradigm and there are more lexical items which take this suffix (cf. e.g. for neighbouring Riffian, Laflkioui, 2007:133).
suffix (cf. III.13.2.8. for the genitive preposition).

‘brother’

<table>
<thead>
<tr>
<th>Number</th>
<th>Gender</th>
<th>Suffix</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:SG</td>
<td>-Ø</td>
<td>ḵma-Ø</td>
<td>‘my brother’</td>
</tr>
<tr>
<td>2:M:SG</td>
<td>-k</td>
<td>ḵma-k</td>
<td>‘your (M) brother’</td>
</tr>
<tr>
<td>2:F:SG</td>
<td>-m</td>
<td>ḵma-m</td>
<td>‘your (F) brother’</td>
</tr>
<tr>
<td>3:SG</td>
<td>-s</td>
<td>ḵma-s</td>
<td>‘his brother’</td>
</tr>
<tr>
<td>1:PL</td>
<td>-</td>
<td>ḵma nn-ax</td>
<td>‘our brother’</td>
</tr>
<tr>
<td>2:PL</td>
<td>-</td>
<td>ḵma nn-un</td>
<td>‘your (PL) brother’</td>
</tr>
<tr>
<td>3:PL</td>
<td>-</td>
<td>ḵma nn-sen</td>
<td>‘their brother’</td>
</tr>
</tbody>
</table>

11.5. Borrowed pronouns

Arabic suffix pronouns are taken over unchanged in Ghomara Berber when borrowed together with Arabic-morphology verbs, prepositions, reflexive and reciprocal elements and some other elements (cf. also Moscoso, 2003:162 and Vicente, 2000:137 for similar forms). Another set of Arabic third person pronouns can be expressed on interrogatives (cf. 11.5.2. below). In addition, one borrowed noun, SG mula PL mwalin ‘owner(s)’ optionally uses the suffix pronoun\(^{115}\). The suffixes for the word classes are similar, however, there are some differences: Most forms have a post-vocalic and post-consonantal form. Only the first person has a separate post-verbal form -ni. We have summarised them in the following scheme:

**Arabic suffix pronouns**

<table>
<thead>
<tr>
<th>Number</th>
<th>Gender</th>
<th>Post-consonantal</th>
<th>Post-vocalic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:SG</td>
<td>-i / -ni (verbal suffix)</td>
<td>-y / -ni (verbal suffix)</td>
<td></td>
</tr>
<tr>
<td>2:SG</td>
<td>-ek</td>
<td>-k</td>
<td></td>
</tr>
<tr>
<td>3:M:SG</td>
<td>-u</td>
<td>-h</td>
<td></td>
</tr>
<tr>
<td>3:F:SG</td>
<td>-a</td>
<td>-ha</td>
<td></td>
</tr>
<tr>
<td>1:PL</td>
<td>-na</td>
<td>-na</td>
<td></td>
</tr>
<tr>
<td>2:PL</td>
<td>-kum</td>
<td>-kum</td>
<td></td>
</tr>
<tr>
<td>3:PL</td>
<td>-em</td>
<td>-hem ~ -hum</td>
<td></td>
</tr>
</tbody>
</table>

The following paradigms show direct object pronominal suffixes attached to a third person singular and a third person plural form of the verb ᵇᵗᵉ𝑞 ‘help’. The glide ᵇʷʷ is inserted

\(^{115}\) Note that in local Arabic, only very few nouns take suffixal pronouns. Instead, Ghomara Arabic, like other Jbala varieties of Arabic, uses the analytical construction with the preposition dyal- to form possessives.
between the conjugational vowel and the pronominal suffix (see also Vicente, 2000:137).

<table>
<thead>
<tr>
<th></th>
<th>ɛṭeq ‘he helped’</th>
<th>ɛeṭqu ‘they helped’</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:SG</td>
<td>ɛṭeq-ni</td>
<td>ɛeṭqu-ni</td>
</tr>
<tr>
<td>2:SG</td>
<td>ɛeṭq-ek</td>
<td>ɛeṭquww-ek</td>
</tr>
<tr>
<td>3:M:SG</td>
<td>ɛeṭq-u</td>
<td>ɛeṭquww-eh</td>
</tr>
<tr>
<td>3:F:SG</td>
<td>ɛeṭq-a</td>
<td>ɛeṭqu-ha</td>
</tr>
<tr>
<td>1:PL</td>
<td>ɛeṭq-na</td>
<td>ɛeṭqu-na</td>
</tr>
<tr>
<td>2:PL</td>
<td>ɛeṭq-kum</td>
<td>ɛeṭqu-kum</td>
</tr>
<tr>
<td>3:PL</td>
<td>ɛeṭq-em</td>
<td>ɛeṭqu-hem ~ -hum</td>
</tr>
</tbody>
</table>

In the following text excerpts the use of the pronouns is illustrated. The borrowed Arabic DO pronoun accompanies the borrowed verb:

(20) ḡḏi ɛṭeq-ni zeg nnmer
jackal help:PF:1S from leopard
‘The jackal helped me (get rid of) from the leopard.’

(21) netta ma ka-t-fehm-u ši eawed
she NEG IMPP-2PL:IMPF-understand-2PL:IMPF NEG again
‘She did not understand him either.’

(22) netta ka-y-tlaqa-ha
he IMPP-3MS:IMPF-meet-2FS:DO
‘He meets her.’

The pronominal paradigm for the indirect object pronoun l- ‘to’ is basically a preposition which accompanies the verb as a pronoun. It does not function independently outside the verb phrase (cf. III.13.5. for other borrowed prepositions).

<table>
<thead>
<tr>
<th></th>
<th>l- ‘to’</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:SG</td>
<td>l-i</td>
</tr>
<tr>
<td>2:SG</td>
<td>l-ek</td>
</tr>
<tr>
<td>3:M:SG</td>
<td>l-u</td>
</tr>
<tr>
<td>3:F:SG</td>
<td>l-a</td>
</tr>
<tr>
<td>1:PL</td>
<td>l-na</td>
</tr>
<tr>
<td>2:PL</td>
<td>l-kum</td>
</tr>
<tr>
<td>3:PL</td>
<td>l-em</td>
</tr>
</tbody>
</table>
The following two examples show the use of the indirect object pronoun with borrowed verbs.

(23) \textastext{ka-ḥṣab = l-a} \textastext{š} \textastext{a} \textastext{t} \textastext{i-ṣṣ.}  
\text{IMPP:suppose:3MS=to:3FS FUT AD 3FS:DO 3MS-eat:A}  
‘She thought that he would eat her.’

(24) \textastext{š} \textastext{i-eiss-u-l-i} \textastext{aḡdi} \textastext{ula nnmer…}  
\text{FUT 3PL:IMPF-guard-3PL:IMPF-to:1S jackal:EL or leopard}  
‘The leopard or the jackal will watch out for me…’

\textbf{mula’} (SG), ‘\textbf{mwali’} (PL) ‘owner/lord’ optionally take the third person pronouns. No other borrowed nouns take a suffix. Instead, the Berber preposition \textit{n} ‘of’ is used to express possession (cf. III.13.2.8.).

(25) \textastext{mwali-ha} \textastext{dda-n} \textastext{fḥal-em}  
\text{owners-3FS go:P-3PL way-3PL}  
‘Her owners went their way.’

(26) \textastext{amḵ a ye-ḥtaž} \textastext{mula-h}  
\text{how REL 3MS-want:P owner-3MS}  
‘It does not matter.’

11.5.1. Other elements that take suffix pronouns

Elements that take Arabic suffix pronouns are \textit{bi-} and \textit{bweḥd-} ‘alone’ used with collective numerals (see III.12.3.). Other elements are \textit{eemmer-} ~ \textit{eummer-} ‘never’, \textit{fḥal-} ‘way’ shown in examples (27) and (28) and \textit{byedd-} ‘self’ in (29) and (30) (See below for reciprocal pronoun \textit{baṭṭiyat} / \textit{baet} ~ \textit{baed} and the reflexive pronoun \textit{miss-} ~ \textit{nefs-}.)

(27) \textastext{eemmr-eḵ ma he-ṣṣ-at aylal?}  
\text{never-2S NEG 2S-eat:P-2S snails}  
‘Have you never eaten snails?’

(28) \textastext{i-qqel} \textastext{fḥal-u}  
\text{3MS-return:P way-3MS}  
‘He went back’

(29) \textastext{šetṭḥ-ax = t} \textastext{byedd-i}  
\text{make.dance:P-1S = 3MS:DO self-1S}  

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‘I made him dance myself.’

(30) wella  a  k = i-bb  netta  byedd-u
or  AD  2MS = 3MS-take:A  he  self-3MS
‘Or he will take you himself.’

11.5.2. Suffix pronouns -ahu, -ahi, -ahem ~ -ahum

The interrogatives nemmen and yemmen, made up of a combination of the simple preposition n ‘of’ and yer ‘at’ with men ~ mmen ‘who, what’ can take the Arabic suffix pronouns: -ahu masculine singular, -ahi feminine singular and -ahem ~ -ahum plural. Furthermore, so can prepositions consisting of a preposition and the element nemmen, so-called prepositional complexes, except for fsi nemmen. For example:

(31) n-emn-ahu?
    of-who-3MS
    ‘Whose is it?’

(32) gum ne-mmen-ahem?
    front of-who-3PL
    ‘In front of whom are they?’

11.6. Reciprocal and reflexive pronouns

The reciprocal element baṭiyat / baṭ ‘each other’ and the reflexive element miss- ~ nefs- ‘self’ are borrowed from Arabic. They take Arabic suffixes. The form baṭ- is found as well, though it is less frequent than the others. It can only be used in the plural. The reciprocal forms are:

baṭiyat- / baṭ- ~ baṭ-
1:PL baṭiyat-na ~ baṭ-na ‘each other’
2:PL baṭiyat-kum ~ baṭ-kum ‘each other’
3:PL baṭiyat-em ~ baṭ-em ‘each other’

For example:

(33) ne-dda  i  baṭiyat-na
    1PL-go:P  with each.other-1PL
‘We went with each other.’

(34)  
\[ \text{te-wt-em} \quad \text{baṭ-kum} \]  
\[ 2\text{PL-hit:P-2PL} \quad \text{each.other-2PL} \]  
‘You hit each other.’

(35)  
\[ \text{wṭa-n} \quad \text{baṭiyat-em} \]  
\[ \text{hit:P-3PL} \quad \text{each.other-3PL} \]  
‘They hit each other.’

An example of the reflexive pronoun is:

(36)  
\[ \text{i-deģ} \quad \text{miss-u} \quad \text{ssbeć} \]  
\[ 3\text{MS-do:I} \quad \text{self-3MS} \quad \text{lion} \]  
‘He pretends he is a lion.’

11.7. Postnominal deictic clitics

There are a number of post-nominal deictic clitics which distinguish proximal, distal and anaphoric deixis. They can cliticise to nouns and pronominal elements with which they agree in number (singular and plural)\(^{116}\). The proximal and distal postnominal deictics have several different emphatic forms. The plural anaphoric deictic has two forms which are in free variation. The deictic clitics are:

<table>
<thead>
<tr>
<th>proximal</th>
<th>distal</th>
<th>anaphoric</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SG.</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a-(\ddot{d})</td>
<td>a-(n)</td>
<td>a-hen</td>
</tr>
<tr>
<td>a-(\ddot{d}i)</td>
<td>a-(n\i)</td>
<td></td>
</tr>
<tr>
<td>a-(\ddot{d}ine)</td>
<td>a-(n\i)</td>
<td></td>
</tr>
<tr>
<td><strong>PL.</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i-(\ddot{d})</td>
<td>i-(n)</td>
<td>i-hen</td>
</tr>
<tr>
<td>i-(\ddot{d}i)</td>
<td>i-(n\i)</td>
<td></td>
</tr>
<tr>
<td>i-(\ddot{d}ine)</td>
<td>i-(n\i)</td>
<td></td>
</tr>
</tbody>
</table>

The agreement in number of the post-nominal clitics is shown in the following examples.

**Masculine Singular**

<table>
<thead>
<tr>
<th>argaz a-(\ddot{d})</th>
<th>‘this man’</th>
</tr>
</thead>
<tbody>
<tr>
<td>argaz a-(n)</td>
<td>‘that man’</td>
</tr>
<tr>
<td>argaz a-hen</td>
<td>‘that man’</td>
</tr>
</tbody>
</table>

**Feminine Singular**

<table>
<thead>
<tr>
<th>tameṭṭuṭ a-(\ddot{d})</th>
<th>‘this woman’</th>
</tr>
</thead>
<tbody>
<tr>
<td>tameṭṭuṭ a-(n)</td>
<td>‘that woman’</td>
</tr>
<tr>
<td>tameṭṭuṭ a-hen</td>
<td>‘that woman’</td>
</tr>
</tbody>
</table>

**Masculine Plural**

| irgazen i-\(\ddot{d}\) | ‘these men’ |

**Feminine Plural**

| tieyyaln i-\(\ddot{d}\) | ‘these girls’ |

\(^{116}\) Deictic clitics in Senhadja, Zenaga, Ghadames also agree in number (see Laškioui, 2007: 206 for demonstrative pronouns, Kossmann, 2013: 56-57 for Ghadames, Taine-Cheikh, 2008: 55 sub ce).
11.8. Demonstrative pronouns

Demonstrative pronouns consist of two elements; a pronominal form and a deictic clitic. There is a masculine singular, a feminine singular and a plural form (there is no feminine plural form). The demonstrative pronouns distinguish proximal, distal/relative and anaphoric deixis. Furthermore, there are separate forms, so-called ‘pronominal heads’ which are used when followed by a determination, i.e., a relative clause or a possessive phrase. The difference with the other demonstrative pronouns is that they cannot be used outside of that specific context. Pronominal heads consist of a pronominal form and the element a in the singular or the element i in the plural. Demonstrative pronouns can follow postnominal clitics to add emphasis. Demonstrative pronouns have many forms which are in free variation, as shown in the overview:

<table>
<thead>
<tr>
<th></th>
<th>proximal</th>
<th>distal/relative</th>
</tr>
</thead>
<tbody>
<tr>
<td>M:SG</td>
<td>u-ha ~ u-haḏ ~ u-haḏin ~ u-haḏineṯ</td>
<td>w-an ~ w-ani ~ w-aniṯ</td>
</tr>
<tr>
<td>F:SG</td>
<td>t-ha ~ t-haḏ ~ t-haḏin ~ t-haḏineṯ</td>
<td>t-an ~ t-ani ~ t-aniṯ</td>
</tr>
<tr>
<td>PL</td>
<td>u-hi ~ u-hiḏ ~ u-hiḏin ~ u-hiḏineṯ</td>
<td>w-in ~ w-ini ~ w-iniṯ</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>anaphoric</th>
<th>pronominal head</th>
</tr>
</thead>
<tbody>
<tr>
<td>M:SG</td>
<td>u-hen ~ u-henni ~ u-henniṯ</td>
<td>w-a</td>
</tr>
<tr>
<td>F:SG</td>
<td>t-hin ~ t-hinni ~ t-hinniṯ</td>
<td>t-a</td>
</tr>
<tr>
<td>PL</td>
<td>u-hin ~ u-hinni ~ u-hinniṯ</td>
<td>w-i</td>
</tr>
</tbody>
</table>

A number of examples of demonstrative pronouns as they are used in texts are:

(37) u-ha emmi nn-em afeṛruž
     M-PRX:S uncle of-2FS rooster:EL
     ‘This is your uncle the rooster.’

(38) t-ha maši yemma
     F-PRX:S NEG mother
     ‘This is not my mother.’

(39) u-hin ma ssn-en walu!

117 The internal vowel in this form is in free variation with e and a. Sometimes the form of this pronoun is t-hen or t-han.
It is possible to combine post-nominal deictics and demonstrative pronouns to add emphasis, as shown in the following examples:

(40) \textit{amaleh = a\text{-}q u\text{-}ha}
\begin{flushright}
\text{fish:\textit{EL} = S\text{\textit{PRX}} MS\text{\textit{PRX}}}
\end{flushright}
‘This fish!’

(41) \textit{tameṭṭut = a\text{-}n t\text{-}an}
\begin{flushright}
\text{woman = S\text{\textit{DIST}} FS\text{\textit{DIST}}}
\end{flushright}
‘That woman!’

(42) \textit{lxeddama = i\text{-}n w\text{-}ini}
\begin{flushright}
\text{workers = PL\text{\textit{DIST}} PL\text{\textit{DIST}}:PL}
\end{flushright}
‘Those workers!’

The following text excerpts show examples of pronominal heads. We have contrasted pronominal heads in (43a), (44a) and (45a) which can only be used in this context, with the forms in examples (43b), (44b) and (45b), which can be used both as antecedents in relative clauses and as demonstrative pronouns (cf. IV.5. syntax for relative constructions). Note that the ‘normal’ demonstrative pronouns have to be followed by the relative marker \(a\).

(43a) \textit{t\text{-}a ye\text{-}nwa\text{-}n i netta}
\begin{flushright}
\text{FS\text{\textit{PRH}} RF\text{be.cooked}\text{\textit{P\textit{RF}}} for he}
\end{flushright}
‘The one (F) that is ripe is for him’

(43b) \textit{t\text{-}an a lla g lbir}
\begin{flushright}
\text{FS\text{\textit{PRH}} REL be:P in well}
\end{flushright}
‘The one that is in the well.’

(44a) \textit{w\text{-}a mn\text{-}es s ššcaš i w\text{-}a ynu s isennanen}
\begin{flushright}
\text{MS\text{\textit{PRH}} of\text{\textit{3S}} with hair and MS\text{\textit{PRH}} my with thorns}
\end{flushright}
‘His have hair and mine have thorns.’

(44b) \textit{škun w\text{-}an a y\text{-}ṭḥerrah\text{-}en?}
\begin{flushright}
\text{who MS\text{\textit{PRH}} REL RF\text{\textit{call}}\text{I\text{\textit{RF}}}}
\end{flushright}
‘Who is that who is calling?’

(45a) ya w-i d = i-ttiṭu-n = d a su
only PL:PRH DC = RF:go:I-RF = DC AD [3MS]-drink:A
‘Only the ones who come will drink’

(45b) ama w-in a ye-dda-n ya leewawel, ya ššmayet
as.for PL-PRH REL RF:go:P-RF only children, only cowards
‘Those who have gone are children, just cowards’

11.9. Indefinite pronouns

The indefinite element ay either occurs on its own or combines with the singular proximal or anaphoric post-nominal deictic to form an indefinite pronoun. The proximal and anaphoric forms have several forms which are in free variation. The element ay marks state.

Proximal

EL ay-ha ~ ay-haḏ ~ ay-haḏi ~ ay-haḏinet
EA w-ay-ha ~ w-ay-haḏ ~ w-ay-haḏi ~ w-ay-haḏinet

Anaphoric

EL ay-hen ~ ay-henni ~ ay-henniṯ
EA w-ay-hen ~ w-ay-henni ~ w-ay-henniṯ

The element ay is always followed by a relative clause introduced by a, as in example (46) and (47). It is therefore always a focus construction (cf. chapter IV.7.2.). It is not possible to use it in any other context. The phrase ay a nnes means ‘property’ (lit. ‘that which is his’). The use proximal and anaphoric indefinite pronouns are shown in example (48) and (49). They get EA marking when preceded by a preposition. As shown in example (50) and (51) the EA form way- can be shortened to wi- or uy.

(46) fk = ay ay a tleb-t-ek
give:IMP = 1S INDEF REL demand:PF-1S-2S:DO
‘Give me what I demanded from you.’

(47) i-sker ay a nn-es
3MS-make:P INDEF REL of-3S
‘He has built up his property.’
‘This is all that he gave to you’

‘He made it into laughter.’

‘After that.’

‘And it is this which I had witnessed.’
12. Numerals

The numeral system of Ghomara Berber is almost completely borrowed from Arabic. In this system cardinal and ordinal numbers are morphologically distinct.

Within the group of cardinal numbers there is a set of numbers which have a different form when preceding nouns referring to time. Only the cardinal number yan ~ ya / yaṯ ~ yah ‘one’ is of Berber origin and shows somewhat different behaviour from the other numbers. The numeral is linked to the noun by the preposition n ‘of’. The noun is in the singular after one. It has a plural form after plural numerals. Arabic morphology nouns always take the article in this construction. The Berber-morphology noun is in the EA. For example:

**NUMERAL n (of) NOUN.**

(1)  
\[ \text{žuž n tseḵtan}\]

two of EA:cows

‘Two cows.’

(2)  
\[ \text{žuž n leḥyif}\]

two of rocks

‘Two rocks.’

12.1. Cardinal numbers

The numeral ‘one’ distinguishes two different forms, Arabic wahit is used on its own while Berber yan ~ ya / yaṯ ~ yah is used to modify a noun. When asked ‘could you count from one to ten’ the people use wahit, žuž ~ zuž, tlaṯa etc. When asked ‘how much do you have?’ the answer could be yan / yaṯ ‘one’. The number ‘two’ is different according to the age group. Very old people use tnayen for counting instead of žuž ~ zuž, which is the common numeral among younger people\(^{118}\). From ‘twenty-one’ upwards until ‘hundred’ the Arabic coordinative element u connects the numerals in the order ‘one and twenty’. In combination with a decimal the form form for ‘two’ is always tnayen. From hundred upwards the order is switched to ‘hunderd and one’ etc. The same applies to ‘thousand and one’, ‘million and one’ etc. All numerals have plural forms with -at except for ‘thousand’ ‘million’ and ‘billion’ which have separate singular and plural forms.

There is a second set of cardinal numerals which consists of the numerals 3 to 19 and 100. This set is used in combination with the numerals ‘hundred’ and ‘thousand’ (except for ‘200’ which gets the form myaṯayen and ‘2,000’ which is alfeldayen) as well as with certain nouns referring to time such as ‘month’, ‘year’. There exists a suffix -ayen which expresses the dual. It is used on a restricted number of nouns. Combined numerals are linked

\(^{118}\) In the Arabic dialect of Anjra the same two forms exist (cf. Vicente 2000:145).
togethere by means of \( \mathbf{u} \sim \mathbf{w} \) (cf. IV.4.1. coordination). Below we present the two sets of cardinal numbers.

<table>
<thead>
<tr>
<th></th>
<th>Set 1</th>
<th>Set 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>( w\text{ḥit, yan} \sim \text{yaṭ} )</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>( ḣuž / zuž, \text{tnayen} )</td>
<td>-</td>
</tr>
<tr>
<td>3</td>
<td>( t\text{laṭa} )</td>
<td>( t\text{elt} )</td>
</tr>
<tr>
<td>4</td>
<td>( \text{areb(b)ea} )</td>
<td>( \text{arbee} )</td>
</tr>
<tr>
<td>5</td>
<td>( \text{xemsə} )</td>
<td>( \text{xems} )</td>
</tr>
<tr>
<td>6</td>
<td>( \text{setta} )</td>
<td>( \text{sett} )</td>
</tr>
<tr>
<td>7</td>
<td>( \text{sebea} )</td>
<td>( \text{sebe} )</td>
</tr>
<tr>
<td>8</td>
<td>( \text{tmenya} )</td>
<td>( \text{tmen} )</td>
</tr>
<tr>
<td>9</td>
<td>( \text{tsecuṭ} )</td>
<td>( \text{tsec} )</td>
</tr>
<tr>
<td>10</td>
<td>( \text{e\text{aśra}} )</td>
<td>( \text{e\text{eśer}} )</td>
</tr>
<tr>
<td>11</td>
<td>( \text{ḥḍaš} )</td>
<td>( \text{ḥḍašer} )</td>
</tr>
<tr>
<td>12</td>
<td>( \text{ṭnaš} )</td>
<td>( \text{ṭnašer} )</td>
</tr>
<tr>
<td>13</td>
<td>( \text{tleṭṭaš} )</td>
<td>( \text{tleṭṭašer} )</td>
</tr>
<tr>
<td>14</td>
<td>( \text{ṛbeɛṭaš} )</td>
<td>( \text{ṛbeɛṭašer} )</td>
</tr>
<tr>
<td>15</td>
<td>( \text{xemmeṣṭaš} )</td>
<td>( \text{xemmeṣṭašer} )</td>
</tr>
<tr>
<td>16</td>
<td>( \text{setṭaš} )</td>
<td>( \text{setṭašer} )</td>
</tr>
<tr>
<td>17</td>
<td>( \text{sbeɛṭaš} )</td>
<td>( \text{sbeɛṭašer} )</td>
</tr>
<tr>
<td>18</td>
<td>( \text{tmenṭaš} )</td>
<td>( \text{tmenṭašer} )</td>
</tr>
<tr>
<td>19</td>
<td>( \text{tseɛṭaš} )</td>
<td>( \text{tseɛṭašer} )</td>
</tr>
<tr>
<td>20</td>
<td>( \text{e\text{išrin}} )</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>( \text{w\text{ḥit} \sim \text{e\text{išrin}}} )</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>( \text{tnayen \sim \text{e\text{išrin}}} )</td>
<td></td>
</tr>
<tr>
<td></td>
<td>etc.</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>( \text{t\text{laṭin}} )</td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>( \text{arebein} )</td>
<td></td>
</tr>
<tr>
<td>50</td>
<td>( \text{xemsin} )</td>
<td></td>
</tr>
<tr>
<td>60</td>
<td>( \text{settin} )</td>
<td></td>
</tr>
<tr>
<td>70</td>
<td>( \text{sebein} )</td>
<td></td>
</tr>
<tr>
<td>80</td>
<td>( \text{tmanin} )</td>
<td></td>
</tr>
<tr>
<td>90</td>
<td>( \text{tsecin} )</td>
<td></td>
</tr>
<tr>
<td>100</td>
<td>( \text{mya} )</td>
<td>( \text{myaṭ} )</td>
</tr>
</tbody>
</table>

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101  \textit{mya w wahi}\textit{t}

\textit{etc.}

200  \textit{mya\textit{ṭayn}}

300  \textit{tel\textit{ṛemya}}

400  \textit{arb\textit{ṛemya}}

500  \textit{xem\textit{ṛemya}}

600  \textit{set\textit{temya}}

700  \textit{seb\textit{ṛemya}}

800  \textit{tem\textit{nemya}}

900  \textit{tes\textit{emya}}

999  \textit{ttes\textit{emya}}

1100  \textit{ḥḍ\textit{ṛašermya}}

1000  \textit{alef}

2000  \textit{alf\textit{ayen}}

3000  \textit{tel\textit{talaf}}

11000 \textit{ḥḍ\textit{ṛašeralf}}

\textit{million}  \textit{menyul}

\textit{žuž n mnayel}

\textit{etc.}

\textit{bilion}  \textit{menyar}

\textit{žuž n mnayer}

\textit{etc.}

The following remarks have to be taken into account with regards to the numeral system:

\textbf{12.1.1. The numeral ‘one’}

‘One’ is the only cardinal numeral that has gender distinction. When used independently the forms are \textit{yan} for masculine and \textit{yat} for feminine. In its function as a modifier of the noun there are several possibilities. Before a masculine Berber noun the forms \textit{yan} \textit{~} \textit{ya} are in free variation as examples (3) and (4) show. Before a feminine Berber noun the forms \textit{ya} \textit{~} \textit{yah} are in free variation as in examples (5) and (6). Arabic-morphology nouns (and other numerals) can only be preceded by the forms \textit{yan} for masculine and \textit{yah} for feminine as exemplified in (7) and (8). The use of \textit{ya} is ungrammatical in such circumstances, as shown by (9). The Arabic-morphology noun always takes the article in such a construction. On the
basis of the plural numerals (from two onwards) there might be reason to consider the form of the masculine number ‘one’ as ya + n + NOUN. However, as there exists a separate form yan and as ya ~ yah can not be linked to a feminine noun by n, (the order is always ya ~ yah + NOUN) we consider n part of the numeral.

(3) yan usɣun
one rope:EA
‘one rope’

(4) ya wṣญuŋ
one rope:EA
‘one rope’

(5) ya temda
one pond:EA
‘a lake’

(6) yah temda
one pond:EA
‘a lake’

(7) yan ʤ-dwiwen
one ART-light:DIMIN
‘a small light’

(8) yah s-sennar-a
one ART-hook-FS
‘a hook’

(9) *ya ssennara
one ART-hook-FS
‘a hook’

12.1.2. Nouns with special morphology
Besides the numerals ‘hundred’ and ‘thousand’ a limited number of nouns is preceded by the numerals from set 2. The singular is expressed by using the bare noun. The dual is expressed using the suffix -ayen. From three until ten the set 2 forms are followed by the plural form of the noun. The numerals eleven to nineteen take a special form with er ending. From twenty upwards the same numerals are used as with other nouns. The noun is in the
singular form from eleven upwards. Note that the noun ‘year’ is variable. It is ɛam for ‘one year’, camayen for ‘two years’, but snin from three to ten years. From ten upwards it is either ɛam or  sna.

<table>
<thead>
<tr>
<th>‘day’</th>
<th>‘month’</th>
</tr>
</thead>
<tbody>
<tr>
<td>nхаr</td>
<td>ʃhaʃ</td>
</tr>
<tr>
<td>yum 9ayn</td>
<td>ʃehr-ayn</td>
</tr>
<tr>
<td>telt eyyam</td>
<td>telt ʃhuʃ</td>
</tr>
<tr>
<td>ṭeḇe eyyam</td>
<td>ṭeḇe ʃhuʃ</td>
</tr>
<tr>
<td>xems eyyam</td>
<td>xems ʃhuʃ</td>
</tr>
<tr>
<td>sett eyyam</td>
<td>sett ʃhuʃ</td>
</tr>
<tr>
<td>seḇe eyyam</td>
<td>seḇe ʃhuʃ</td>
</tr>
<tr>
<td>tmen eyyam</td>
<td>tmen ʃhuʃ</td>
</tr>
<tr>
<td>tse eyyam</td>
<td>tse ʃhuʃ</td>
</tr>
<tr>
<td>eeʃr eyyam</td>
<td>eeʃr ʃhuʃ</td>
</tr>
<tr>
<td>ḫaʃer yum</td>
<td>ḫaʃer ʃhaʃ</td>
</tr>
<tr>
<td>tmanin yum</td>
<td>tmanin ʃhaʃ</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>‘year’</th>
</tr>
</thead>
<tbody>
<tr>
<td>ɛam</td>
</tr>
<tr>
<td>ɛam-ayn</td>
</tr>
<tr>
<td>telt snin</td>
</tr>
<tr>
<td>ṭeḇe snin</td>
</tr>
<tr>
<td>xems snin</td>
</tr>
<tr>
<td>sett snin</td>
</tr>
<tr>
<td>seḇe snin</td>
</tr>
<tr>
<td>tmen snin</td>
</tr>
<tr>
<td>tse snin</td>
</tr>
<tr>
<td>eeʃr snin</td>
</tr>
<tr>
<td>ḫaʃer cam ~ sna</td>
</tr>
<tr>
<td>tmanin cam ~ sna</td>
</tr>
</tbody>
</table>

12.1.3. Money units

The most frequently used money units in the Jbala are ryal, frank and derhem. One ryal is half a dirham and a frank is 1/100 of a dirham. The old term pesṣita is used by older people. The currencies are counted in different ways, either using the genitive preposition n or by simple juxtaposition of the numeral and the noun. When the preposition is used, the noun always has the article l-.

Below some examples of each of the nouns will be presented.
ryal

ryal ‘one ryal’
žuž ryal ~ žuž n rryal ‘two ryal’
eešra ryal ~ eešra n rryal ‘ten ryal’
ḥḏaš ryal ~ ḥḏaš n rryal ‘eleven ryal’
alef ryal ~ alef n rryal ‘thousand ryal’

frank

frank ‘one frank’
žuž frank ~ žuž n lefrank ‘two frank’
eešra frank ~ eešra n lefrank ‘ten frank’
eišrin frank ~ eišrin n lefrank ‘twenty frank’
alef frank ~ alef n lefrank ‘thousand frank’

derhem

Note that for the numerals 11 till 19 set 2 cardinal numbers are used.
derhem ‘one dirham’
žuž derhem ~ žuž n ddraham ‘two dirham’
eešra derhem ~ eešra n ddraham ‘ten dirham’
ḥḏašer derhem ~ ḥḏaš n dderhem ‘eleven dirham’
ṭnašer derhem ~ ṭnaš n dderhem ‘twelve dirham’
tlaṯin dderhem ~ tlaṯin n dderhem ‘thirty dirham’
alef dderhem ~ alef n dderhem ‘thousand dirham’
menyul dderhem ~ menyul n dderhem ‘milion dirham’

peṣṣita

Note that there are three possibilities for ‘a million peseta’.
yah peṣṣita ‘one peseta’
žu pṣaṣat ~ žuž n lepṣaṣet ‘two peseta’
tlaṯin peṣṣita ~ tlaṯin n lepṣaṣet ‘three peseta’
menyul peṣṣita ~ menyul n lpēṣṣita ~ menyul n lepṣaṣet ‘million peseta’

12.1.4. Time reference

When referring to time the numeral ‘one’ is feminine. The other numerals are the normal cardinal numbers. The preposition g ‘in’ is used to signify ‘at’.

g lweḥda ‘at one o’clock’
g žžuž / zužuž ‘at two o’clock’
g tlaṯa ‘at three o’clock’
etc.

12.2. Ordinal numbers

Ordinal numbers keep their Arabic morphology. Except for numbers luli ‘first’, tani ‘second’ and laxri ‘last’ all ordinal numbers are formed by applying the cacc scheme to the cardinal numbers. Ordinal numbers up to ten are used. In the singular, masculine and feminine gender are distinguished. The feminine singular marker is -a or -ya, while the plural marker is -in or -yin. Ordinal numbers always take the Arabic-morphology article. The ordinal numbers are:

<table>
<thead>
<tr>
<th>M:SG</th>
<th>F:SG</th>
<th>PL</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>luli</td>
<td>luli-ya</td>
<td>luliyy-in</td>
<td>first</td>
</tr>
<tr>
<td>tani</td>
<td>tany-a</td>
<td>tan-in</td>
<td>second</td>
</tr>
<tr>
<td>taleṯ</td>
<td>talṯ-a</td>
<td>talṯ-in</td>
<td>third</td>
</tr>
<tr>
<td>ṛaḇeɛ</td>
<td>ṛaḇe-a</td>
<td>ṛaḇe-in</td>
<td>fourth</td>
</tr>
<tr>
<td>xames</td>
<td>xams-a</td>
<td>xams-in</td>
<td>fifth</td>
</tr>
<tr>
<td>saḏes (~saḏs)</td>
<td>saḏs-a (~saḏs-a)</td>
<td>saḏs-in (~saḏes)</td>
<td>sixth</td>
</tr>
<tr>
<td>saḇeɛ</td>
<td>saḇe-a</td>
<td>saḇe-in</td>
<td>seventh</td>
</tr>
<tr>
<td>tamen</td>
<td>tamn-a</td>
<td>tamn-in</td>
<td>eighth</td>
</tr>
<tr>
<td>taseɛ</td>
<td>tase-a</td>
<td>tase-in</td>
<td>ninth</td>
</tr>
<tr>
<td>ɛašer</td>
<td>ɛašr-a</td>
<td>---</td>
<td>tenth</td>
</tr>
<tr>
<td>laxri</td>
<td>laxri-yya</td>
<td>laxri-yyin</td>
<td>last</td>
</tr>
</tbody>
</table>

12.3. Collective numerals

There are two adverbial constructions using numerals which are used to signify either the fact that something was done alone b weḥd-SUFFIX or together b NUMERAL bi-SUFFIX. The latter construction takes only plural suffixes. Both constructions are borrowed from local Arabic and take Arabic pronominal forms.

b weḥd- ‘alone’  b NUMERAL bi- ‘together’

1. b weḥd-i
2. b weḥd-eḵ
3. b weḥd-u
3. b weḥd-a

1. b weḥd-na  b žžuž bi-na

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<table>
<thead>
<tr>
<th></th>
<th>b weḥd-kum</th>
<th>b arbea bi-kum</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.</td>
<td>b weḥd-em</td>
<td>b tlaṭa bi-hem</td>
</tr>
</tbody>
</table>
13. Prepositions

Prepositions in Ghomara Berber can be divided into two groups: simple prepositions and prepositional complexes. The simple prepositions can be further subdivided into those that have both a prenominal and a pronominal form and those that only have a prenominal form. Pronominal forms of the preposition are followed by a prepositional suffix (cf. III.11.3. pronouns). Prenominal forms are followed by nouns in the EA, provided the noun has state distinction (cf. chapter III.1.1.3. for a discussion of state). Exceptions to this are the prepositions bla ‘without’ and qḇel ‘before’. Unlike many other Berber languages, prepositions do not have a separate form or syntactic position in relative constructions (cf. for example Kossmann 1997: 213-233 for Figuig Berber). Prepositional complexes consist of an element followed by the preposition n. The three elements ammas, af ~ afel, aḡemmaṭ have nominal characteristics. Two of these consistently mark state on the prefix when preceded by a preposition. The three elements tṭerf, aḡemmaṭ, ammas can be preceded by a preposition and occur without the following preposition i / n ‘of’. The other elements only occur in prepositional complexes. There is one preposition, fsir ‘behind’ which like the simple prepositions takes pronominal suffixes, but takes n before a noun. Furthermore, there are a few Arabic prepositions which take Arabic suffixes. Finally, there are some marginal prepositions borrowed from Arabic that are used in collocations or as part of a borrowed construction. Some prepositions can be combined. This chapter is divided into two parts. In the first part the different types of prepositions are enumerated. In the second part each of the prepositions is discussed separately.

13.1. Types of prepositions

13.1.1. Simple prepositions

On the one hand there are prepositions which have identical forms when followed by a noun and when followed by a pronominal suffix, on the other hand there are prepositions which distinguish the two forms. There is one case of suppletion (s and iḍ-), and a number of prepositions have an additional a in the pronominal form (e.g. zeg and zga). Some prepositions have different forms that are in free variation. The pronominal form of the genitive preposition n has an irregular form in the first person singular and a geminate form for all other persons.

<table>
<thead>
<tr>
<th>Prenominal</th>
<th>Pronominal</th>
<th>State</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>i ~ iḍ</td>
<td>iḍ-</td>
<td>EA</td>
<td>comitative</td>
</tr>
<tr>
<td>s</td>
<td>iḍ-</td>
<td>EA</td>
<td>instrumental</td>
</tr>
<tr>
<td>dar ~ da</td>
<td>dar-</td>
<td>EA</td>
<td>allative</td>
</tr>
<tr>
<td>day ~ dayer</td>
<td>dayer-</td>
<td>EA</td>
<td>allative ‘chez’</td>
</tr>
</tbody>
</table>
It is possible to combine prepositions to a limited extent. The element \( z \), probably a shortened form of \( zeg \), can precede \( yer \) and \( gum \) (see below) to add the meaning ‘from’ (it can be combined with some adverbs as well, cf. III.14.). Prepositions can be combined with the element \( mɛn \) \((\sim m)\) to form prepositional interrogatives (cf. IV.6.4. interrogatives).

### 13.1.2. Simple prepositions without pronominal forms

A few prepositions do not take pronominal suffixes. They can be followed by an independent pronoun. Nouns that follow these prepositions have the EA, except for nouns following \( bla \) ‘without’ which can have EL or EA and nouns that follow \( qḇel \) which have EL. The dative preposition \( i \sim iḏ \) can be substituted by the indirect object pronoun (cf. III.11.2.2. for the full IO paradigm).

<table>
<thead>
<tr>
<th>Preposition</th>
<th>State</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>( i \sim iḏ )</td>
<td>EA</td>
<td>dative</td>
</tr>
<tr>
<td>( am )</td>
<td>EA</td>
<td>similative</td>
</tr>
<tr>
<td>( ḥettar )</td>
<td>EA</td>
<td>‘until’</td>
</tr>
<tr>
<td>( qḇel )</td>
<td>EL</td>
<td>‘before’</td>
</tr>
<tr>
<td>( bla )</td>
<td>EA / EL</td>
<td>‘without’</td>
</tr>
</tbody>
</table>

### 13.1.3. Prepositional complexes

Prepositional complexes are combinations of two elements, the final one of which is the genitive preposition \( n \) ‘of’ and in one case optionally \( i \) ‘to’. The second preposition of the complex can be used in the prenominal as well as in the pronominal form. Nouns following the prepositional complex are in the EA. The first element is either a Berber nominal element such as \( ammas^{119} \) ‘in the middle’ and \( af \) ‘above’, \( aḡʷemmat \) ‘opposite’, which mark state, or an Arabic borrowed nominal element, \( tṭerf \) ‘beside’. The latter must have a preceding preposition which is often \( i \) ‘with’. The element \( af \) has a variant \( aḏel \) which is used adverbially. When \( aḡʷemmat \) is followed by a noun the preposition \( i \) is used instead of \( n \),

---

119 This noun also means ‘waist (of the body)’ and has a plural: SG. \( ammas \) PL. \( immasen \).
while with pronouns n is used. The elements gum and nešṭ occur only as part of complex prepositions.

<table>
<thead>
<tr>
<th>EA</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>gum n</td>
<td>---</td>
<td>‘in front of, beside’</td>
</tr>
<tr>
<td>ammas n</td>
<td>wammas</td>
<td>‘in the middle of’</td>
</tr>
<tr>
<td>af n / afel</td>
<td>waf / wafel</td>
<td>‘on top (of)’</td>
</tr>
<tr>
<td>aḡemmaṭ i / n-</td>
<td>uḡemmaṭ</td>
<td>‘on the opposite side of’</td>
</tr>
<tr>
<td>ṭṭerf n</td>
<td>---</td>
<td>‘beside’</td>
</tr>
<tr>
<td>nešṭ n</td>
<td>---</td>
<td>‘as big as’</td>
</tr>
</tbody>
</table>

The preposition fsir ~ sfir is ambiguous between a prepositional complex and a simple preposition. Prenominal forms have the preposition n, while in pronominal forms the pronoun immediately follows the preposition.

<table>
<thead>
<tr>
<th>Prenominal</th>
<th>Pronominal</th>
</tr>
</thead>
<tbody>
<tr>
<td>fsi n ~ sfi n</td>
<td>fsir ~ sfir ~</td>
</tr>
</tbody>
</table>

13.1.4. Arabic prepositions

Three prepositions of Arabic origin keep their original morphology; qḇalt- and byaṛt- meaning ‘opposite’ and lil- ~ dil- in šḥal lil- ~ šḥal dil- (Other borrowed Arabic prepositions, ela, b, f, l do not occur independently, but appear in adverbials, collocations or as part of indirect object marking, cf. chapter III.14. for adverbs). The pronominal forms of the prepositions take the Arabic suffixes. When these prepositions are followed by a noun, the noun is in the EL, provided the noun has state distinction.

13.2. Simple prepositions

13.2.1. Comitative preposition i ~ iḏ at / with

The comitative preposition has the form i or iḏ before a noun, as shown in examples (1) and (2). The most common form is i, while iḏ is mainly used by old people. When a pronominal suffix is added only the form iḏ is used, as in example (3).

(1)  i-dda = d  i  umdakkul  nn-es
     3MS-go:P = DC with  friend:EA  of-3S
     ‘He came with his friend.’
(2) \( s\text{š}hee ~ ma\text{s}h ~ a ~ s\text{s} ~ a\text{n}ikef ~ iḍ ~ u\text{g}di \)

lion ~ FUT ~ AD ~ [3MS]-eat:A ~ hedgehog:EL ~ and ~ jackal:EA

‘The lion is going to eat the hedgehog and the jackal.’

(3) \( i\text{-}dd\text{a} = d ~ iḍ\text{-}es \)

3MS-go:P = DC ~ with-3S

‘He came with him.’

13.2.2. Instrumental preposition \( s \) ‘with’

The pronominal form of the instrumental preposition \( s \) is \( iḍ^{120} \). Compare the following sentences, (4) is an example of the prenominal form while (5) is the pronominal form.

(4) \( i\text{-}d\text{de}z ~ i\text{bawen} ~ s ~ us\text{yar} \)

3MS-crush:P ~ beans ~ with ~ stick:EA

‘He crushed the beans with a stick.’

(5) \( i\text{-}d\text{de}z ~ iḍ\text{-}es ~ i\text{bawen} \)

3MS-crush:P ~ with-3:MS ~ beans

‘He crushed the beans with it.’

13.2.3. Allative preposition \( dar \sim da \) ‘to’

The allative preposition \( dar \) has a purely allative meaning ‘in the direction of’. This differs from many Berber varieties in which the allative preposition carries the meaning comparable with French ‘chez’ as well (1 - \( \text{y}e\text{r} \) for Figuig, Kossmann, 1997: 224-225, \( \text{y}e\text{r} \) for Aït Seghrouchen, Bentolila, 1981: 215 \( dar \) in Tashelhiyt cf. van den Boogert 1997:235).

Ghomara Berber uses a separate preposition \( d\text{ay} \sim d\text{ayer} \) for ‘chez’. Examples of \( dar \) are:

(6) \( d\text{da}\text{n} ~ dar ~ u\text{rrar} \)

go:P-3PL ~ to ~ threshing.floor:EA

‘They went to the threshing floor.’

(7) \( n\text{et}t\text{a} \text{ṭ}a ~ h\text{-}t\text{effey} ~ dar\text{-}es ~ s\text{sluq}iyya = yahen \)

she ~ 3FS-go.out:P ~ to-3S ~ greyhound = S:ANP

‘That greyhound then went to her.’

---

\(^{120}\)This use is the same in Amṭiqan according to El Hannouche’s data (2010: 130). Interestingly in Colin’s text (1929:52) the pronominal form of the first person is \( s\text{iss} \)-i. In Iɛṛaḇen a speaker told me that the preposition \( s\text{iss} \) is used in Beni Menṣur. Furthermore in Colin’s text (1929) the preposition \( s \) is used in an ablative sense in the phrase \( iḍ ~ u\text{şne}kk\text{a}f ~ \text{iffey} ~ s ~ t\text{eryalt} \) ‘Then the hedgehog came out of the basket.’
It is possible to combine the preposition *dar* with the prepositional complexes *gum n* ‘in front of’, *af n* ‘on top of’, *amm a n* ‘in the middle of’, *ağwemmat n* ‘opposite’, for example:

(8)  
\[
\begin{array}{l}
\text{yaalli}ah qerrb = at \quad \text{dar gum n te-sla-t} \\
\text{come.on move:IMP = 3FS:DO to front of bride:EA} \\
\text{‘Come on, move her in front of the bride.’}
\end{array}
\]

*Dar* can precede nouns with a locative meaning, as well as nouns with temporal meaning, for example:

(9)  
\[
\begin{array}{l}
\text{ṣ a y n-ezz dar ẓṣbeḥ} \\
\text{FUT AD 3MS:DO 1PL-leave:A to morning} \\
\text{‘We’ll leave it till the morning.’}
\end{array}
\]

The form of the preposition *da* is in free variation with *dar* as the following examples show.

(10a)  
\[
\begin{array}{l}
i-ttuṭu saweḏ da waššin \\
\text{3MS-go:IMP again to stable:EA} \\
\text{‘He goes to the stable.’}
\end{array}
\]

(10b)  
\[
\begin{array}{l}
i-dda dar wayeḏ a ṭṭes \\
\text{3MS-go:P to ash:EA AD [3MS]-sleep:A} \\
\text{‘He went to sleep in the ash.’}
\end{array}
\]

(11a)  
\[
\begin{array}{l}
da lemḏina \\
to city
\end{array}
\]

‘to the city’

(11b)  
\[
\begin{array}{l}
t-ell-i-t \quad \text{dar lemḏina} \\
\text{2S-go up:A-2S to city} \\
\text{‘You go to the city.’}
\end{array}
\]

13.2.4. **Preposition day ~ dayer ‘chez’**

The preposition *day ~ dayer* has about the same meaning as the French preposition ‘chez’.\(^{121}\) The preposition can only be followed by nouns referring to humans\(^{122}\). The

\(^{121}\) In Moroccan Arabic the preposition *lɛend* exists, which is a combination of allative I ‘to’ and pseudo-verb *ɛend*. Caubet (1993: 219) translates this verb in French with ‘vers chez’. Moroccan Arabic and Ghomaran Berber are very similar as regards this preposition as *dayer* is a combination of the allative preposition *dar* and the possessive preposition *yer*.  

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complete form **daɣer** is hardly ever used before a noun in continuous speech. We have encountered one exception in our texts before a noun beginning with vowel i (example 13). See the following examples:

(12) *saqa te-dda daɣ urgaż nn-es*
then 3FS-go:P chez man:EA of-3S
‘Then she went to her husband.’

(13) *i-lkem daɣer išurkan*
3MS-arrive:P chez peasants
‘He arrived at the peasants.’

The prepositions **dar ~ da** and **day ~ daɣer** can both be used before a noun referring to a human being. However, the meaning is different, as illustrated by the following examples. (14a) is a statement of somebody going to the location of the *Kaid* (local governor), whereas in (14b) the interpretation is that the person is going to the person (e.g. to resolve a conflict or so).

(14a) *i-dda day lqayeq*
3MS-go:P to Kaid
‘He went to the Kaid’s place.’

(14b) *i-dda da lqayeq*
3MS-go:P to Kaid
‘He went to the Kaid.’

13.2.5. **Locative preposition g ‘in’**

The locative preposition **g ‘in’** has the allomorph **ga** when used with a pronoun as shown in the following example:

(15) *yaʃ te-qqim g uxyam i žuż rew-l-en*
one:F 3FS-stay:P in house:EA and two flee:P-3PL
‘One stayed in the house and two fled.’

An example of the pronominal use of prepositions is:

(16) *ne-sskar ga-s i-syar-en*

---

122 Speaking animals in tales are treated as humans.
13.2.6. Ablative preposition zeg ~ zga- ‘from’

This preposition expresses movement from a location. The pronominal form is zga-. This preposition also functions as a conjunction in the combination zegya (cf. IV.4.2.7. conjunctions). Compare the following examples for the different forms.

(17) *ffeɣ zeg uxyam*
3MS-go.out:P from house:EA
‘He got out of his house.’

(18) *ssel yn zga-s tisukran*
drink:1-3PL from-3S partridge:EL
‘The partridges drink from it.’

13.2.7. Locative preposition xf ~ fx ~ x ~ f ‘on’

This preposition is a locative preposition ‘on’. It has several pronominal allomorphs which are in free variation. The form x is most often used, while fx occurs less often. The variant f is attested only once in our corpus with an old speaker. We have not encountered xf in prenominal position. The prepositional suffix is suffixed to either of the forms xf or fx. We present the complete suffixal paradigm with the two forms xf and fx below. Some forms are irregular. In the first and third person plural schwa can end up in an open syllable after the initial consonant cluster. The first consonant (n or s) of the suffix is then geminated.

1:SG       xf-i ~ fx-i
2:M:SG      xf-ek ~ fx-ek
2:F:SG      xf-em ~ fx-em
3:SG        xf-es ~ fx-es ~ fx-es
1:PL        xef-nex ~ fx-ennex
2:PL        xf-un ~ fx-un
3:PL        xf-essen ~ xef-sen ~ fx-essen ~ fex-sen

Examples (19), (20) and (21) illustrate the prenominal forms.

---
123 In Amṭiqan the f is used while fex seems to be absent (El Hannouche 2010: 133-134). In the Colin (1929) texts f occurs as well.
(19) š a ġg-ay aẓṛu fx uẓṛu
   FUT AD do:A-1S stone:EL on stone:EA
   ‘I will put a rock on a rock.’

(20) ay akfer dha x lḥafa ya-d
   VOC turtle:EL here on stone S-PRX
   ‘You turtle here on this rock.’

The one occurrence of f is in the following sentence. The noun taṭṭiwan ‘eyes’ does not have a state difference.

(21) rry-an as lḡeld f taṭṭiwan nn-es
   return:P-3PL 3S:IO skin on eyes of:3M
   ‘They put his skin on his eyes.’

The following examples show the suffixal forms. Examples (23), (24) and (25) show the implicative use, i.e., the preposition conveys that the action has an effect on someone that has no control over the action (cf. Kossmann 1997: 223 who introduced this notion for Figuig Berber).

(22) š a qetrr-en fx-essen
   FUT AD drip:A-3PL on-3PL
   ‘They will drip on them.’

(23) leḥšam = i-hen kerrk-en xf-es
   children = PL-ANP lie:P-3PL on-3S
   ‘Those children lied to him.’

(24) i-ḥerṛeḥ xf-es
   3MS-call:P on-3S
   ‘He called him.’

(25) i-tḍeṣṣa x te-myar-t nn-es
   3MS-laugh:I on woman:EA of-3S
   ‘He laughs about his wife.’
13.2.8. Genitive preposition n ‘of’

The main function of the genitive preposition is to link two nouns, typically to form a possessive construction. The first person of the pronominal forms has an irregular form. In the rest of the paradigm the regular prepositional suffix is suffixed to the geminate nn.

<table>
<thead>
<tr>
<th>Person</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:SG</td>
<td>inu</td>
</tr>
<tr>
<td>2:M:SG</td>
<td>nn-ek</td>
</tr>
<tr>
<td>2:F:SG</td>
<td>nn-em</td>
</tr>
<tr>
<td>3:SG</td>
<td>nn-es</td>
</tr>
<tr>
<td>1:PL</td>
<td>n-nax</td>
</tr>
<tr>
<td>2:PL</td>
<td>nn-un</td>
</tr>
<tr>
<td>3:PL</td>
<td>nn-sen</td>
</tr>
</tbody>
</table>

Their use is shown in the following examples:

(26)  *afraw n tḡiḡet*
leaf:EL of tree:EA
‘The leaf of a tree.’

(27)  *afraw nn-es*
leaf:EL of-3:SG
‘Its leaf’

13.2.9. Possessive / locative preposition yer ~ ɣ / yer- ‘at’

This preposition has two forms; when suffixed it has the form yer-, when prenominal the form has free variation between yer and ɣ. It is used in possessive and locative constructions as shown in the examples below.

(28)  *yer-sen leḥšam g  getByam s warsin*
at-3PL children in house:EA with hunger:EA
‘They have hungry children in the house.’

(29)  *i-mmug g martin, ɣ uletma-s*
3MS-die:P in Martil at sister-3S
‘He died in Martil, at his sister’s (place)’

(30)  *yer muḥemmeṯ leflus nn-ek*
at Mohammed money of-2MS
‘Mohammed has your money.’

The preposition can be preceded by an element ẓ (probably from zeg, maybe from s) which yields ẓye(r) meaning ‘from someone/somewhere’, for example:

(31) i-dda  d ẓye ẓeddi  nn-es
     3MS-go:P  DC from grandfather  of-3S
‘He came from (at) his grandfather’

13.2.10. Preposition zdu ‘under’
The preposition zdu ‘under’ has the allomorph zdaw before pronominal suffixes.

(32) i-ḵšem   zdu  waḵal
     3MS-enter:P  under  earth:EA
‘He entered under the soil.’

(33) nekki  zdaw-es
     1  under-3MS
‘I am under it.’

13.2.11. Preposition sennig ‘above’
This preposition has a variant pronominal form senniga- in the first person singular, second person feminine singular and in the plural. In the second person masculine and the third person the form is sennig-. The preposition followed by the complete suffixal paradigm is as follows:

1:SG     senniga-y
2:M:SG    sennig-eḵ
2:F:SG    senniga-m
3:SG     sennig-es
1:PL      senniga-nax
2:PL      senniga-wen
3:PL      senniga-sen

Examples:
(34) aḡṭt i-neṭṭeq sennig uxyam
bird:EL 3MS-fly:I above house:EA
‘The bird is flying over the house.’

(35) walakin ma ya te-ğ-ğ-eṭ ści sennig leafya
but NEG AD 2S-do:A-2S NEG above fire
‘But do not put it above the fire.’

(36) haw senniga-y
PR:3MS above-1S
‘He is above me.’

13.3. Simple prepositions without pronominal forms
The simple prepositions discussed in this section do not take pronominal suffixes. They only have a prenominal form (with possible free variation) and can be followed by an independent pronoun. Nouns that mark a state distinction have the EA when following most of these prepositions, but with bla ‘without’ there is free variation between the use of EA and of EL. Nouns are in the EL after the preposition qbel ‘before’.

13.3.1. Dative preposition i ~ iḏ to / for\(^{124}\)
The dative preposition has two prenominal forms which are in free variation i ~ iḏ; the variant iḏ is more often used by old people. The preposition has the form iḏx in the pronominal form. It is often (though not obligatorily) used in combination with the dative pronoun in a ditransitive phrase (compare examples 37 and 38). The preposition i can be followed by an independent pronoun, as in example (39). Example (40) shows the use of the variant iḏ.

(37) i-dda i-fk = as = t i ya tmeṭṭuṭ
3MS-go:P 3MS-give:P = 3S:IO = 3MS:DO to one:F woman:EA
‘He gave it to a woman.’

(38) i-dda i-fk = aṭ i ya t-meṭṭu-ṭ
3MS-go:P 3MS-give:P = 3MS:DO to one:F woman:EA
‘He gave it to a woman.’

(39) t-a ye-nw-an i netta

\(^{124}\) i ~ iḏ functions a coordinative element as well (cf. chapter IV.4. on coordination and subordination).
The ripe one for him.

(40) \(i\text{-}nn = as\quad i\text{-}d\quad nn\text{mer}\)

3MS-say:P = 3S:IO to leopard

‘He said to the leopard.’

The preposition can be substituted by the indirect object pronoun, for example (41) can be substituted by (42) (cf. III.11.2.2. for indirect object pronouns):

(41) \(ifk = a\text{t}\quad i\quad ya\quad tm\text{ettut}\)

3MS-give:P = 3MS:DO to one:F woman:EA

‘He gave it to a woman.’

(42) \(ifk = as = t\)

3MS-give:P = 3S:IO = 3MS:DO

‘He gave it to her.’

13.3.2. Preposition am ‘like, the same as’

In the following two examples the use of the preposition is shown:

(43) \(maw\text{ši}\quad am\quad ke\text{ği}\)

NEG like you

‘Not like you.’

(44) \(am\quad t\text{eebbist},\quad am\quad t\text{gayzuṭ}\)

like calf:EA like calf:EA

‘A t\text{eebbist} (calf) is the same as a t\text{gayzuṭ} (calf).’

13.3.3. Preposition ḥettar ‘until’

The preposition has the form ḥettar. Before a liquid consonant the \(r\) is omitted as in example (45); under other circumstances the presence of \(r\) is obligatory (48). An alternative construction with the same meaning is the preposition ḥetta followed by the preposition dar\(^{125}\), as examples (46) and (47) show. The conjunction ḥetta meaning ‘also/until’ also functions as a subordinator (cf. chapter IV.4.2.6.).

(45) ḥetta\quad lextuḫer

\(^{125}\) It is found in Colin’s text (1929:55) as well: ḥetta dar wasif ‘until the river’.
until winter
‘Until the winter season.’

(46)  
i-dda  hettar  uxyam  i-qqel = d
3MS-go:P until house:EA 3MS-return:P = DC
‘He went until the house and came back.’

(47)  
i-dda  hetta  dar  uxyam  i-qqel = d
3MS-go:P until house:EA 3MS-return:P = DC
‘He went until the house and came back.’

(48)  *
i-dda  hettar  uxyam  i-qqel = d
3MS-go:P until house:EA 3MS-return:P = DC
‘He went until the house and came back.’

13.3.4. Preposition bla ‘without’
This preposition can only be followed by a (pro)noun. Following this preposition a Berber morphology noun can be in the EL or in the EA. The speakers accepted both example (50) with EA marking and example (51) with EL marking.

(49)  
he-dda  dayer  lehšam  nn-es,  ya  he-dda  bla  waman.
3FS-go:P until children of3MS only 3FS-go:P without water:EA
‘She went to her children, though she went without water.’

(50)  
i-dda  bla  uceyyal  nn-es
3MS-go:P without child:EA of3S
‘He went without his child.’

(51)  
i-dda  bla  aseyyal  nn-es
3MS-go:P without child:EL of3S
‘He went without his child.’

13.3.5. Preposition qbel ‘before’ (temporal)
This preposition is only used in a temporal meaning. In combination with ma this preposition functions as a conjunction/complementiser (cf. IV.4.2.5. on conjunctions). It does not take a pronominal suffixes and is followed by a noun in the EL.

(52)  
qbel  leeša
before dinner
‘before dinner’

(53) qbel azal
    before  midday:EL
‘before midday’

13.4. Prepositional complexes

Prepositional complexes consist of a (noun-like) element + the genitive preposition n ‘of’. As a consequence, all Berber morphology nouns that follow these complexes have the EA. The preposition fsir ~ sfir is an exception, as it does not have the genitive preposition in its pronominal forms, while it is combined with the preposition n prenominally. We will present examples of the pronominal and pronominal forms of each prepositional complex.

13.4.1. Prepositional complex gum n ‘in front of / beside’

This prepositional complex means both ‘in front of’ and ‘next to/beside’. For example:

(54) netta i-bdeğ waqef gum n uxyam
    he 3MS-stand.up:P stand.up:AP:MS in.front of house:EA
‘He stood still in front of/beside the house.’

(55) t-sers = as gum nn-es ya wdideğ
    3FS-put:P = 3S:IO in.front of 3S one:M pestle:EA
‘She put a pestle next to/in front of her.’

The preposition can be preceded by other prepositions, such as dar and zeg, which express movement towards or from the front of a location.

(56) yallah qeṛṛb = at dar gum n te-sla-ṭ
    come.on move:IMP = 3FS to in.front of bride:EA
‘Come on, move her in front of the bride.’

The preposition can be preceded by the element z which yields z gum n ‘from in front of’.

13.4.2. Prepositional complex af n ~ afel ‘on top of’

This prepositional complex occurs in combination with other prepositions such as g, dar and zeg. The form waf is in free variation with af as shown in the following two examples. The form is afel when it is used adverbially as in (59) and (60).
13.4.3. Prepositional complex ammas n ‘in the middle of’

In this complex, the first element is a noun meaning ‘waist, middle’ (PL: immasen). This prepositional complex is often preceded by another preposition (often g, but also dar and zeg). The preposition takes the EA when preceded by a preposition. The preposition n links the noun to a following element (prepositional suffix or noun). ammas can be used as a noun standing on its own, as in examples (64) and (65). Examples are:

(61) g wammass n ūšar
in middle:EA of village
‘In the middle of the village.’

(62) g wammass nn-es
in middle:EA of-3S
‘In the middle of it.’

(63) i-dda dar wa-mmas n lemḏina
3MS-go:P to middle:EA of city
‘He went to the center of the town.’

(64) haw g wammass
PR:3MS in middle:EA
‘He is in the middle.’
13.4.4. Prepositional complex ḥaw‘emmat (n) / i ‘opposite side’

This prepositional complex takes the EA when preceded by another preposition such as dar or zeg. The preposition g cannot be used with ḥaw‘emmat. ḥaw‘emmat can function as a noun standing on its own as example (66) and (67) show. When it functions within a prepositional complex, the pronominal form has the preposition n as its second part (example 68), while the pronominal form has i (example 69):

(66) i-d-da dar uḡ‘emmat
3MS-go:P to other.side:EA
‘He went to the other side.’

(67) i  niḥma twala-n = ṭet ḥaw‘emmat, is-sen
and they see:IMPF-3PL = 3FS:DO other.side:EL with-3PL
‘And they see her on the other side, with them.

(68) i-d-da dar uḡ‘emmat nn-es
3MS-go:P to other.side:EA of-3S
‘He went to the other side of it.’

(69) i-d-da dar uḡ‘emmat i uxyam = ahen
3MS-go:P to other.side:EA to house:EA=S:ANP
‘He went to the other side of that house.’

13.4.5. Prepositional complex i ṭṭeṛf n ‘side of, beside’

This prepositional complex is based on the Arabic noun ṭṭeṛf ‘side’ combined with the preposition n. The preposition is preceded by i ~ ḫ, dar and zeg. In the following examples the pronominal and the pronominal forms are used.

(70) i ṭṭeṛf n uxyam
with side of house:EA
‘On the side of the room.’

(71) i ṭṭeṛf nn-es
with side of 3S
‘on its side’
13.4.6. Prepositional complex nešt n ‘as big as/as old as’

This prepositional complex can mean both ‘as big as’ and ‘as old as’. In (72) and (73) examples of the prenominal and pronominal forms are given.

(72) netta nešt n kma-s
    he as.big.as of brother-3S
    ‘He is as big as his brother.’

(73) netta nešt nn-es
    he as.big.as of-3S
    ‘He is as big as him.’

13.4.7. Prepositional complex fsi n ~ sfi n / fsirxes ‘behind’

This element combines features of the prepositional complexes and simple prepositions\textsuperscript{126}. As example (74) shows, before a noun the genitive preposition n is used. Example (75) shows that the preposition takes suffixes. The r is always absent when followed by n, while the pronominal form always has r. This preposition has both locative (76), and temporal reference (77).

(74) haw fsi n uxyam=a
    PR:3MS behind of house:EA = S:ANP
    ‘He is behind that house.’

(75) netta maši fsir-es i-tbaybay
    he go:AP:MS behind-3S 3MS:bleat:I
    ‘He was walking behind him bleating.’

(76) sfi n yayil=a-a-
    behind of mountain:EA = S-PRX
    ‘Behind this mountain.’

(77) fsi n lmakla
    behind of meal
    ‘After the meal.’

\textsuperscript{126} In the Colin (1929: 54) texts the form zd\textit{f}ir-es is found.
13.5. Arabic prepositions

There are two Arabic prepositions, *qbalṭ* ‘opposite’ and *byart* ‘opposite’, which take Arabic suffixes (cf. III.11.5.). The element *lil* ~ *dil* follows *šḥal* which together mean ‘how long ago’. The complete paradigm of the prepositions including their suffixes is shown below. Note that different from the Berber paradigm there is no gender distinction in the second person, but there is a distinction in the third person singular:

<table>
<thead>
<tr>
<th></th>
<th><em>qbalṭ</em> ‘opposite’</th>
<th><em>byart</em> ‘opposite’</th>
<th><em>lil</em> ~ <em>dil</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>1:SG</td>
<td>qbalṭ-i</td>
<td>byart-i</td>
<td>lil-i ~ dil-i</td>
</tr>
<tr>
<td>2:SG</td>
<td>qbalṭ-ek</td>
<td>byart-ek</td>
<td>lil-ek ~ dil-ek</td>
</tr>
<tr>
<td>3:M:SG</td>
<td>qbalṭ-u</td>
<td>byart-u</td>
<td>lil-u ~ dil-u</td>
</tr>
<tr>
<td>3:F:SG</td>
<td>qbalṭ-a</td>
<td>byart-a</td>
<td>lil-a ~ dil-a</td>
</tr>
<tr>
<td>1:PL</td>
<td>qbalṭ-na</td>
<td>byart-na</td>
<td>lil-na ~ dil-na</td>
</tr>
<tr>
<td>2:PL</td>
<td>qbalṭ-kum</td>
<td>byart-kum</td>
<td>lil-kum ~ dil-kum</td>
</tr>
<tr>
<td>3:PL</td>
<td>qbalṭ-em</td>
<td>byart-em</td>
<td>lil-em ~ dil-em</td>
</tr>
</tbody>
</table>

A noun following one of these prepositions takes the EL, e.g.

(78) *qbalṭ*  *axyam*

‘opposite *axyam*’

(79) *byart*  *amaras*

‘opposite *amaras*’

(80) *šḥal*  *lil-ek*  *ma*  *he-zr-at=t?*

‘How long ago did you see him?’
14. Adverbs
Adverbs modify propositions. They are elements which do not belong to another part of speech and they can and often do function as the central element of an adverbal clause. A number of adverbs have nominal origin. They have an a- prefix which changes to u- or wa- in the EA. However, different from most nouns they do not have a plural form and they cannot be the head of an NP (e.g. they do not take postnominal determiners). The following adverbs have been identified which can be divided into different categories.

**Temporal Adverbs**

<table>
<thead>
<tr>
<th>Arabic</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>nhaṛ / nhaṛ aḏ / nhaṛ ahen</td>
<td>‘day’ (also: ‘today’, ‘that day’)</td>
</tr>
<tr>
<td>amilla ~ amella (wa-)</td>
<td>‘now’</td>
</tr>
<tr>
<td>amla eid (wa-)</td>
<td>‘just now’</td>
</tr>
<tr>
<td>deydak ~ deydayak</td>
<td>‘earlier today’</td>
</tr>
<tr>
<td>asa (wa-)</td>
<td>‘nowadays’</td>
</tr>
<tr>
<td>aẓgasnət - aẓg“asnət (u-)</td>
<td>‘last year’</td>
</tr>
<tr>
<td>asleṭ (u-)</td>
<td>‘two years ago’</td>
</tr>
<tr>
<td>asleṭ n usleṭ</td>
<td>‘three years ago’</td>
</tr>
<tr>
<td>alaẓen (wa-)</td>
<td>‘tomorrow’</td>
</tr>
<tr>
<td>nafazen ~ lafaẓen</td>
<td>‘the day after tomorrow’</td>
</tr>
<tr>
<td>anawiṭin ~ aliwiṭin (wa-)</td>
<td>‘in three days’</td>
</tr>
<tr>
<td>~ liwiṭin ~ niwiṭin</td>
<td></td>
</tr>
<tr>
<td>nafaznaẓ</td>
<td>‘in three days’</td>
</tr>
<tr>
<td>aḡam (wa-)</td>
<td>‘yesterday’</td>
</tr>
<tr>
<td>aṣelatgam (u-)</td>
<td>‘the day before yesterday’</td>
</tr>
<tr>
<td>asnuṣelatafam (u-)</td>
<td>‘three days ago’</td>
</tr>
<tr>
<td>llumayen id</td>
<td>‘the past few days’</td>
</tr>
<tr>
<td>daʔimen</td>
<td>‘always’</td>
</tr>
<tr>
<td>caḍ ~ eid</td>
<td>‘still, yet’</td>
</tr>
<tr>
<td>saca</td>
<td>‘then, later’</td>
</tr>
<tr>
<td>mbeḍ</td>
<td>‘after’</td>
</tr>
<tr>
<td>zegya</td>
<td>‘from the time that’</td>
</tr>
<tr>
<td>bihaba</td>
<td>‘directly’</td>
</tr>
<tr>
<td>meṛra</td>
<td>‘time, occasion’</td>
</tr>
<tr>
<td>meṛra meṛra</td>
<td>‘sometimes’</td>
</tr>
<tr>
<td>meqbehya</td>
<td>‘almost’</td>
</tr>
<tr>
<td>xeṭra</td>
<td>‘time, occasion’</td>
</tr>
</tbody>
</table>
Manner Adverbs

- `hamḵa ~ hamḵad ~ hamḵan` 'in this way, like this'
- `~ hamḵadin ~ hamḵadinet` 'quickly'
- `deyya` 'slowly'
- `belli` 'good'
- `mezyan` 'straight on, right'

Locative Adverbs

- `dha ~ dhaḏ ~ dhaḏin ~ dhaḏinet` 'here'
- `das ~ dan` 'there'
- `zdas` 'from there'
- `ssiha ~ ssihaḏ` 'from here, through here'
- `~ ssihaḏin ~ ssihaḏinet` 'from there, through there'
- `ssyan ~ ssyas` 'from there, through there'
- `darha ~ dariha ~ darihaḏ` 'to here'
- `~ darihaḏin ~ darihaḏinet` 'to there'
- `daryan ~ daryas` 'to there'
- `ssihan ~ ssyani` 'from there'
- `beṛṛa ~ beṛṛayan` 'outside'
- `zbeṛṛa` 'from outside'
- `ɛla beṛṛa` 'on the outside'
- `daxel` 'inside'
- `z daxel` 'from the inside'
- `haḇeṭ` 'the upper side, upwards'
- `ṭaleɛ` 'the lower side, downwards'
- `afel (wa-)` 'on the top'

The preposition `dar` is combined with the active participles `ṭaleɛ` 'above', `haḇeṭ` 'down' to form locative adverbials.

- `dar ṭaleɛ` 'upwards'
- `dar haḇeṭ` 'downwards'

Quantative Adverbs

The following elements can all be linked to the noun by the preposition `n`. They function as adverbs on their own as well. The element `šhal` is an interrogative as well. `kamel / kamla / kamlin` is derived from an adjective.
xrebbi  ‘quite a lot, quite a while’
bezzaf  ‘a lot, many’
meṛra  ‘all’
kamel - kamla - kamlin  ‘all’
šweyya  ‘a little’
šwiwweš  ‘very little’
ši ḥaža  ‘a bit’
šḥal  ‘a lot’
kṭer ~ xṭer  ‘more’

The following element can only be linked to a noun by means of n ‘of’.

beɛḍ ~ beɛṭ  ‘some (people)’

Other Adverbs
yyeh  ‘yes’
a ~ ah  ‘yes’
lla  ‘no’
beeda  ‘already’
aqa ~ qa  ‘wait a moment’
ḍḥal ḫḥal  ‘the same’
xyar  ‘better’
ḥsen  ‘better’
bellati  ‘wait’
ela qedd- (+ 3 person Arabic suffix)  ‘bad’
belḥeqq  ‘in fact’
amexṭa  ‘probably’
waqila  ‘probably’
aboṣṣaḥ  ‘it is unlikely that’
ilaxiri-hi / -ha / - him  ‘etcetera’
yak  ‘isn’t it’
IV Syntax

1. The noun phrase

The noun phrase consists at least of a core. All additional elements are optional. Different elements can function as the core of a noun phrase: nouns, adjectives, independent pronouns, demonstratives and numerals. The maximal structure of the noun phrase is:

\[(\text{Indefinite} + n) - (\text{Quantifier} / \text{Composite prep.} + n) - \text{Core} - (\text{Poss}) - (\text{Indefinite/Deictic}) - (\text{Adjective}) - (n + \text{NP}) (\text{kamel} / \text{kamla} / \text{kamlin}) - \text{relative clause}\]

The core can be modified by additional elements. Independent pronouns can only be modified by the adverb MS \text{kamel}, FS \text{kamla}, PL \text{kamlin} or by a relative clause (cf. III.14. for adverbs and IV.5. for relative clauses). Any noun phrase can be modified by a relative clause which always follows the core (most frequently in a focus construction cf. chapter IV.7.2.). Indefinites and quantifiers (including numerals) precede the core and are always linked to it by means of the prepositions \(n\) ‘of’. The possessive slot immediately following the head is only meant for possessive pronouns suffixed to kinship terms (see III.11.4.). For obvious reasons, the indefinite determiner cannot cooccur with the deictic postnominal elements. Adjectives appear in postnominal position. In this chapter the elements that can constitute the noun phrase will be presented. First the noun including its determiners will be treated. The Arabic article and the genitive construction form separate subjects within this section. Then adjectives and their use in comparative and superlative constructions are dealt with. Independent and demonstrative pronouns will be treated and finally numerals and the distributive will be presented.

1.1. The noun

In this section several examples of noun phrases will be given in which the head is modified by different elements. We will present each of the possible modifiers of the NP. There are three prenominal indefinite modifiers (\(ya\) \(kra\), \(ši\) ~ \(š\) and \(yan\) ~ \(ya\) / \(yat\) ~ \(yah\) and one postnominal modifier \(inši\) ~ \(nši\) ~ \(iši\) (cf. III.11.7. morphology for postnominal deictic clitics). The preposition \(n\) is always used to link the prenominal indefinite to the head. These modifiers are inextricably linked to definiteness. Another important factor is presence or absence of the article \(l\) in Arabic-morphology nouns (see 1.1.1. below). We follow Brustadt (2000: 18-31) in defining definiteness as a continuum along two axes; individuation and specificity. The modifier (\(ya\) \(kra\) is used for non-individuated, non-specific. It is relatively rare in texts, and when it occurs it always modifies nouns referring to human beings (example (1)). This is the main difference with the other non-individuated, non-specific modifier, \(ši\), which is more frequently attested and is also used for things. Example (2) and (3) show its use. (\(ya\) \(kra\) is only used for plurals. The numeral \(yan\) ~ \(ya\) / \(yat\) ~ \(yah\) ‘one’
is used for specific, individuated entities, as in example (4) (cf. III.12. on numerals). In example (5) the speaker refers to a specific brother to which something happened. Example (6) shows the reduced form of ši.

(1) kra n leḥšam
    some of children
    ‘some children’

(2) ši n leflus aḡ lla-n lwext = ahen g ṭanġa
    some of money PST be:P-3PL time = S:ANP in Tangier
    ‘A kind of money that there was in that time in Tangier.’

(3) dda-n = d ši n irgazen
    go:P-3PL = DC some of men
    ‘Some men came.’

(4) nettata yr-es ya n lxeddam id-es das
    she at-3S one:M of worker with-3S there
    ‘She has a servant with her there.’

(5) ya n kma nn-ax twedder ṭtarix = ahen g tanġa
    one:M of brother of-1PL be:lost[3MS:PF] time = S:ANP in Tangier
    ‘One of our brothers went missing that time in Tangier.’

(6) ye-dda dar š n yayed
    3S-go:P to some of ash:EA
    ‘He went to some ash.’

The indefinite determiner inši ~ nši ~ iši differs from the preceding determiners in that it is postnominal. The different forms are in free variation. It is used with individuated non-specific referents and can be translated as ‘some’ in English. It is clear what kind of entity is referred to, but it is not clear or relevant which one out of the class of possibilities is referred to. Some examples from texts are:

(7) mki ṭleb-t xf-es ḡaža inši ma i-tweqqaf = ak ši
    if ask.for-2S:PF on-3S thing some NEG 3S-stop:1 = 2MS:DO NEG
    ‘If you ask him something, he will not refuse.’

(8) mki te-ll tameyra ynši ilaxiri n leʔila ynši nn-sen
if 3FS-be:P wedding:EL some etc. of family some of-3PL
‘If there is some wedding or so of some family of theirs.’

(9)  i  nnhar  iši  te-qql = as = d  s  ssultan
and day some 3FS-return:P = 3S:IO = DC with sultan
‘And one day she came back with the Sultan.’

Quantifiers, including numerals, are linked to the noun by means of the preposition n. In the following examples the use of a quantifier and a numeral is shown.

(10)  bezzaf  n  iḇawen
many of beans
‘many beans’

(11)  ažemmuc  n  leḥšam
group:EL of children
‘A group of children.’

(12)  žuž  n  temɣaṛan
two of women:EA
‘two women’

The numeral ‘one’ can be used to indicate approximiate number (cf. III.12.1.2. for numerals). For example:

(13)  bb = d  yan  žuž  kilu
take:IMP = DC one:M two kilo
‘Bring approximately two kilo’s’

Deictics are postnominal and agree in number with the core. In (14) an example of a deictic is shown (cf. III.11.7. for the whole paradigm).

(14)  lehyaif = iḏ
stones = PL:PRX
‘these rocks’

Adjectives can modify the core, as in (15). Adjectives agree with the core in number and gender (cf. III.9. for adjectival morphology).
1.1.1. The article

In most cases, non-berberised Arabic loans contain the Arabic definite article. In some rare instances in our text corpus, which we sum up below, the article is absent. However, in negative contexts where the article must be absent in Moroccan Arabic, it is present in Ghomara Berber, in example (16). Based on elicitation it is therefore best to assume that there is free variation in the contexts given below.

(16) ma ssay-en lḥaža te-ša
NEG buy:I-3PL thing 3FS-strong:P
‘They do not buy good things.’

In non-negative context in Moroccan Arabic, the absence of the article marks an element ‘quelconque non nul’ (Caubet, 1993: 265). This means that it refers to ‘a certain X’ not specifying its characteristics. In this sense it is individuated and non-specific. It may also be within the context of a general statement about the thing. In this situation sometimes the article is also absent in Ghomara Berber. Some examples are:

(17) teyan-en l-berrani\textsuperscript{127}, a, berrani. berrani kamel
look:I-3PL ART-foreigner, yes, foreigner foreigner all
‘They look for foreigners, yes, foreigners.
ag lla-n tšebb-šen = t
PST be:P-3PL grab:I-3PL=3MS:DO
They grabbed all foreigners.’

The article can also be absent when used in combination with the postnominal inši ~ nši ~ iši. In the following example, the noun meemel does not take an article, but the following noun lqehwa ‘café’ does. For example:

(18) ama g l-ḥanuṭ, wella g meemel inši, wella g l-qehwa inši
regarding in ART-shop, or in factory some, or in ART-café some
‘However in the shop or in a factory or in a café.’

\textsuperscript{127} This is a collective noun.
In the following example of a non-verbal predicate, the article in the noun himaya ‘protection’ is absent. This use does not refer to any specific protection, but rather to protection in a very general way.

(19) amla keği šwiya id-i himaya
    now:EL you:MS little with-1S protection
    ‘Now, you are giving me a bit of protection.’

In example (20) the generality of the statement is emphasised by the use of the verb II ‘to be’.

(20) u te-lli-t ma ga-k ūṣ
    and 2S-be:A-2S NEG in-2MS falsehood
    ‘And you are not false.’

Example (21) shows a noun eezri ‘young adult’ which is on a very high level of generality as well.

(21) ak te-lla-t ɪlaxirih eezri wella w ak te-lla-t mezzī
    PST 2S-be:P-2S etc bachelor or and PST 2S-be:P-2S young:MS
    ‘You were a bachelor and you were young.’

In the following elicited example, the absence of the article seems to indicate lack of identifiability to the listener. The speaker gives information with the idea that the listener does not know which specific garden he/she is referring to.

(22) yr-i yarṣet mezyan-a, yr-i yarṣet maši mezyan-a
    at-1S vegetable.garden good-FS, at-1S vegetable.garden NEG good-FS
    ‘I have a good vegetable garden, and a bad vegetable garden.’

When used as a modifier or as an attributive predicate, adjectives do not have the article. Example (25) shows that the use of the article in this position is ungrammatical. However, when the adjective is nominalised (i.e. the X one), it can be present. Nominalised adjectives are placed in core position and can take the definite article as shown in examples (23) and (24) (cf. III.9. for adjective morphology and the section on adjectives IV.2.2. below). Nominalised adjectives keep their original gender/number morphology.

(23) te-nn = ay = t le-yliqt-a = ahen
    3FS = say:P = 1S:IO = 3FS:DO ART-fat-FS = S:ANP
‘The fat one told me.’

(24)  
\[ fka-n = ay = t \quad le-qṣir-in = ihen \]
\[ \text{give:P-3PL = 1S:IO = 3FS:DO} \quad \text{ART-short-PL = PL:ANP} \]
‘The short ones gave it to me.’

(25)  
\[ ^{*gr}-ax \quad tamyart = ahen \quad l-eyliṭ-a \]
\[ \text{see:P-1S} \quad \text{woman:EL = S:ANP} \quad \text{ART-fat-FS} \]
‘I saw the fat woman yesterday.’

### 1.1.2. Genitive constructions

Genitive constructions are formed by means of a prepositional phrase with n following the head noun. Genitive constructions often mark a relation of possession or ownership, as in example (26). However, different relationships between possessor and possessed are also possible including part-whole relationship as in (27).

(26)  
\[ axyam \quad n \quad ɛaziz \]
\[ \text{room:EL} \quad \text{of} \quad \text{Aziz} \]
‘Aziz’s house’

(27)  
\[ lqac \quad n \quad lbir \]
\[ \text{bottom of} \quad \text{well} \]
‘the bottom of the well’

Genitive constructions also express the material which an object is made of. The head noun is modified by another noun which refers to some material, like ‘wood’ in example (28). This type of modification is semantically close to adjectival modification (cf. III.9. for adjectives).

(28)  
\[ tażellaḥt \quad n \quad isɣaren \]
\[ \text{djellaba:EL} \quad \text{of} \quad \text{sticks} \]
‘djellaba of sticks/wooden djellaba’

There are also more abstract genitive-like constructions which are not a possessor - possessed relationship, which have an attributive function, for example:

(29)  
\[ ifurma \quad n \quad ursaz \]
\[ \text{figure \ of \ man:EA} \]
‘the figure of a man’
When pronominalised, a lexically restricted set of nouns has adnominal suffixes rather than a construction with n in the singular: kma ‘brother’, uleţma ‘sister’ and ayetma ‘brothers and sisters’. When such a noun is modified by a non-pronominal genitival expression, there is double possessive marking, for example:

(32) uleţma-s n uɛeyyal = ad
sister-3S of boy:EL = S:PRX
‘the sister of this child’

A similar construction is used with kinship nouns that do not take the adnominal suffixes. In this case there are two n-phrases, for example:

(33) yemma nn-es n firçawn
mother of:3S of Pharaoh
‘Pharaoh’s mother.’

Finally, the adjectival element kamel - kaml - kamlîn ‘all’ can modify the whole noun phrase, which makes it different from other adjectives which can only modify the core and which can function as a predicate themselves. Compare the following examples.

(34) irgazen n ierañen kaml-in
men of Irañen all-PL
‘All the men of Irañen’

A relative clause can modify the head noun (cf. IV.5 for relative clauses).

(35) i usebbiz a ye-dda-n
to bull:EA REL RF-go:P-RF
‘to the bull that went’
1.2. Adjectives

Adjectives form a separate word class (cf. III.9.). They can function as heads of a noun phrase as well. In this position they can, but need not, be prefixed by the Arabic article, which functions as a nominaliser. The meaning difference remains unclear. Both Arabic and Berber-morphology adjectives can take the article. Like nouns, these adjectives can be further modified by other elements. Compare the following examples:

(36)  \(idda = d \; me\ddot{z}zi \; i \; meqqur\)

\[3S\text{-go:P=DC big:MS and small:MS}\]

‘The big one and the little one have come.’

(37)  \(idda = d \; l-me\ddot{z}zi \; i \; l-meqqur\)

\[3S\text{-go:P=DC ART-big:MS and ART-small:MS}\]

‘The big one and the little one have come.’

(38)  \(le\-khel \; i \; le\-\dot{h}mer \; safr\text{-}en \; da \; ya \; tma\dot{z}irt \; beid\text{-}a\)

\[\text{ART-black:MS and ART-red:MS travel:P-3PL to one:F country:EA far-FS}\]

‘The black one and the red one travelled to a far away country.’

(39)  \(khel \; i \; \dot{h}mer \; safr\text{-}en \; da \; ya \; tma\dot{z}irt \; beid\text{-}a\)

\[\text{black:MS and red:MS travel:P-3PL to one:F country:EA far-FS}\]

‘A black one and a red one travelled to a far away country.’

It is not possible to modify adjectives by a genitive construction with \(n\). It is possible to use a nominalised form of the adjective in this position. Compare the following examples:

(40)  \(*yan \; twil \; n \; urgaz?\)

\[\text{one:M tall:MS of man:EA}\]

‘a tall man’

(41)  \(idda = d \; ya \; u\text{hen}\text{-}twil \; n \; urgaz\)

\[3S\text{-go:P=DC one:M tall.man:EA of man:EA}\]

‘This tall man came.’

Note that de-adjectival colour nouns (which are also morphologically different from adjectives) cannot modify another noun (cf. III.4.3.), as shown in example (42). They function as normal nouns.

(42)  \(*ticeeyyalan \; tikehlawan\)
1.2.1. Comparatives and superlatives

Adjectives can be used in comparatives and superlatives. Different from mainstream Moroccan Arabic, there are no special morphological forms of the adjective expressing degree (cf. for example Aguadé & Vicente, 1997). The structure of comparatives is NP + adjective + nešt n ‘as big as’ / am ‘as’. There is no special form for superlatives, the normal NP + adjective suffices. Depending on the context, other means such as adverbs kteṛ ‘more’ and preposition phrases with zeg ‘of’ and x ~ fex ~ f ‘on’ can be used as well. In elicitation the adjective in the superlative construction does not take the article. However, we have encountered an example with the article in a text, which is the adjective le-qdim-in in example (46). In this particular sentence the other forms do not take an article.

**Comparative:**

(43) axyam = ahen qdim nešt n temz fasta = yahen
house:EL=S:ANP old:MS like of mosque:EA=S:ANP
‘That house is as old as that mosque.’

(44) lbaru = an meqqur nešt n yayil
ship=S:DIST big:MS as of mountain:EA
‘That ship is as big as a mountain.’

(45) nihma zaim-in kteṛ zg-asen
they bad9PL more from-3PL
‘They are uglier than them.’

**Superlative:**

(46) u-hin a lla qdim-in dhaḏin. tafrawt qdim-a dha x
those REL be:P old-PL here. Tafrwat old-FS here on M-
‘They are the oldest here. Tafrwat is older here than
u-hiḏ a k = nna-x kaml-in. tafrawt, leʔila n lgawt, PL:PRX REL 2MS:IO = tell:P-1S all-PL Tafrwat, family of lgawt,
all the others I have mentioned to you. Tafrwat, the family of lgawt,
nihma le-qdim-in x u-hiḏ a k = nna-x kaml-in.
they ART-old-PL on M-PL:PRX REL 2MS:IO = tell:P-1S all-PL
they are the oldest of the ones I have mentioned.’
The following examples show the use of adverbs and prepositions to express a superlative. Another option is to use a pronominal head followed by a relative form of the adjective, as in:

(47) \[ \text{lebhar} = \text{ad} \quad \text{yareq} \]
    \[
    \text{see} = \text{S:PRX} \quad \text{deep:MS}
    \]
    ‘This sea is deep/the deepest.’

(48) \[ \text{nihma} \quad \text{zhim-in} \quad \text{zg-asen} \quad \text{kaml-in} \]
    \[
    \text{they} \quad \text{bad-PL} \quad \text{from-3PL} \quad \text{all-PL}
    \]
    ‘They are the ugliest (of them all).’

(49) \[ \text{fk} = \text{ay} = \text{d} \quad \text{w-a} \quad \text{y-qiq-in} \]
    \[
    \text{give:IMP} = \text{1S:IO} = \text{DC} \quad \text{MS-PRH} \quad \text{RF-DIM:thin-RF}
    \]
    ‘Give me the thin(nest) one.’

1.3. Independent and demonstrative pronouns

Independent pronouns can only be modified by the element \text{kamel} \sim \text{kamla} \sim \text{kamlin} ‘all’ and by a relative clause. Both follow the pronoun.

(50) \[ \text{nihma} \quad \text{kaml-in} \]
    \[
    \text{they} \quad \text{all-PL}
    \]
    ‘All of them.’

Demonstrative pronouns consist of a pronominal form to which a deictic is added (cf. III.11.8. morphology). Demonstratives can function as the head of an NP, and can be modified by different elements: by adjectives, by a relative clause, and by the element \text{kamlin}, for example:

(51) \[ \text{u-had} \quad \text{a} \quad \text{ye-swa-n} \quad \text{aman} = \text{ihen} \]
    \[
    \text{M-S:PRX} \quad \text{REL} \quad \text{RF-drink:P-RF} \quad \text{water} = \text{PL:ANP}
    \]
    ‘The one who drank the water.’

(52) \[ \text{u-hi} \quad \text{kaml-in} \]
    \[
    \text{M-PL:PRX} \quad \text{all-PL}
    \]
    ‘All of these.’

(53) \[ \text{u-hi} \quad \text{muqqr-et} \quad \text{ma} \quad \text{mezyan-in} \quad \text{s} \]

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M-PL:PRX big-PL NEG good-PL NEG
‘These big ones are not good.’

1.4. Numerals

A numeral can function as the head of a noun phrase. It can be modified by multiple modifiers, for example:

(54) \textit{dda-}n = \textit{d} tlāṭa \textit{inšī} \textit{muqqr-}ēt
\begin{align*}
go:3\text{PL} = \text{DC} & \text{three} & \text{some} & \text{big-PL} \\
& \text{‘Three big ones came.’} \\
\end{align*}

The numeral ‘one’ can refer to ‘somebody’, for example:

(55) \textit{i-dda} = \textit{d} \textit{yan} \textit{zeg} ucērub
\begin{align*}
3\text{MS}-\text{go} = \text{DC} & \text{one:M} & \text{from} & \text{acērub:EA} \\
& \text{‘One man came from Aarhob (village)’} \\
\end{align*}

(56) \textit{i-}ē\textit{dra} \textit{ssīha} \textit{yan} a \textit{y-}\textit{ṭwil-}i\textit{n} i \textit{yan} a \textit{y-}\textit{qṣir-}i\textit{n}
\begin{align*}
3\text{MS}-\text{pass}:\text{P} & \text{from.here} & \text{one:M} & \text{REL} & \text{RF}-\text{tall-RF} & \text{and} & \text{one:M} & \text{REL} & \text{RF}-\text{short-RF} \\
& \text{‘A tall one and a shot one went past here.’} \\
\end{align*}

1.4.1. The distributive

Numerals, nouns and adjectives can be repeated to give a distributive reading.

(57) \textit{dda-}n = \textit{d} \textit{yan} \textit{yan}
\begin{align*}
go:3\text{PL} = \text{DC} & \text{one:M} & \text{one:M} \\
& \text{‘They came one by one.’} \\
\end{align*}

(58) \textit{qēṭtē} = \textit{aṭ} mezzī-\textit{t} mezzī-\textit{t}
\begin{align*}
cut:\text{IMP} = 3\text{MS-D} & \text{small-PL} & \text{small-PL} \\
& \text{‘Cut it in small pieces.’} \\
\end{align*}

(59) \textit{ne-dda} amaras amaras
\begin{align*}
1\text{PL-go:P} & \text{riverbed:EL} & \text{riverbed:EL} \\
& \text{‘We went all the way past the riverbed.’} \\
\end{align*}

(60) \textit{i-}ē\textit{ella} tayilt tayilt
\begin{align*}
3\text{MS-go.up}:\text{P} & \text{mountain:EL} & \text{mountain:EL} \\
& \text{‘He went all the way over the mountains.’} \\
\end{align*}
2. Non-verbal predicates
Non-verbal predicates are subdivided in nominal, adjectival, prepositional and adverbial predicates. There are further subdivisions within the groups of prepositional and adverbial predicates. Nominal and adjectival non-verbal predicates are used as attributives. Nouns and adjectives which function as an attributive predicate always follow the subject noun. The subject need not be expressed in non-verbal clauses (depending on the context). Some examples will be given. In the following section the non-verbal predicates are presented (cf. IV.7. on information structure for marked structures). Included in this section are the locative predicate and the existential predicate. After that, the pronouns haw / hay / ham which play a role as markers of present relevance are presented. The elements ha- and eend- are treated separately. In the final section, the negation of non-verbal predicates is presented.

2.1. The nominal predicate
In an attributive construction the predicate noun is juxtaposed to the subject noun without any linking element. The two nouns are expressed to form an attributive nominal predicate (cf. Lafkiouï, 2011: 35). There is no intonational pause between the noun phrases. The subject precedes the predicate. For example:

(1)  \textit{lxeddama = ihen  rrwafa}

\begin{center}
\footnotesize workers = PL:ANP  riffians
\end{center}

‘Those workers are riffians.’

(2)  \textit{i-nn = as:  aḇaw  aḇaw  waḥa}

\begin{center}
\footnotesize 3MS-say:P = 3S:IO  bean:EL  bean:EL  only
\end{center}

‘He said: a bean is just a bean.’

In non-verbal sentences the subject need not be expressed. The answer to the question šk a irebbḥen bezzaf? ‘Who earns most?’ could be:

(3)  \textit{ṭṭḥiḥ  maši  abeḥri}

\begin{center}
\footnotesize  doctor  not  fisherman:EL
\end{center}

‘It is the doctor, not the fisherman.’
Other examples are:

(4)  \textit{ssxun!}  
\text{hot}  
‘It is very hot.’  

(5)  \textit{nhar = ad aywer!}  
\text{day = S:PRX moon:EL}  
‘The moon is very bright today.’  

(6)  \textit{lehwa!}  
\text{rain}  
‘It is raining.’  

(7)  \textit{tkerfis!}  
\text{trouble}  
‘This is a lot of trouble.’  

2.2. The adjectival predicate

In its attributive function, the adjective modifies a head. The adjective can function as an attributive predicate as well. In this situation it never gets the Arabic article. In examples (8) and (9) the predicative use is shown. The subject precedes the predicate to which it is juxtaposed.

(8)  \textit{nettaṭa ṭwil-a}  
\text{she tall-FS}  
‘She is tall.’  

(9)  \textit{ḍderba nn-ek  ḫdim-a}  
\text{hit of-2MS weak-FS}  
‘Your punch is weak.’  

2.3. The prepositional predicate

The prepositional predicate is a predicate consisting of a (pro)noun followed by a preposition. The preposition can be pronominalised. The (pro)noun functions as the subject (cf. III.13. for the meaning of the prepositions, cf. also Lafkioui 2011:43). Some examples of pronominalised and non-pronominalised prepositional predicates are:
In prepositional predicates with yer ‘at’ the predicate precedes the subject, for example:

(13) yr-es ya n ddker
    at-3S one:M of male
    ‘He has a boy’

(14) yer muḥemmed leflus nn-ek
    at Mohammed money of-2MS
    ‘Mohammed has your money.’

(15) nettaṯa yr-es g ya teesušt lehšam = ihen
    she at-3S in one:F nest:EA children = PL:ANP
    ‘She has those children in a nest.’

The genitive predicate is formed by a subject followed by a prepositional phrase with n ‘of’. The subject is necessarily expressed as shown in (18).

(16) axyam = ahen n eaziz
    house:EL = S:ANP of Aziz
    ‘That house is Aziz’s.’

(17) t-haḍ nnes
    F-S:PRX of-3S
    ‘This one (F) is his.’
Prepositional phrases with the instrumental preposition \( s \) can also function as predicates, for example:

\[(19)\] \( w\)-\( in \) \( \text{inu} \) \( s \) \( \text{ššcar} \) \( i \) \( w\)-\( in \) \( n \) \( u\text{nikef} \) \( s \) \( \text{isennanen} \)

\[\text{M-PL:DIST my with hair and M-PL:DIST of hedgehog:EA with spines}\]

‘Mine have hair and those of the hedgehog have spines.’

Prepositional phrases with the prepositions \( \text{xef} \sim \text{fex} \) ‘on’ \( \text{zeg} \) ‘from’ can function as predicates as well.

\[(20)\] \( \text{fx-em} \) \( l\text{ʔamen} \)

\[\text{on-you:FS safety}\]

‘You are safe.’

\[(21)\] \( \text{tax}^{\text{raft}} = \text{ad} \times \text{uḍdi} \) \( \text{id} \) \( \text{u\text{nikef}} \)

\[\text{story:EL=S:PRX on jackal:EA and hedgehog:EA}\]

‘This story is about the jackal and the hedgehog.’

An example of a predicate with the preposition \( \text{zeg} \) ‘from’ is the following idiomatic expression.

\[(22)\] \( \text{zga-s} \) \( \text{kušši} \)

\[\text{from-3S everything}\]

‘He provides everything.’

The comitative predicate is formed by using the comitative predicate \( \text{i} \sim \text{id} \), for example:

\[(23)\] \( \text{netta} \) \( \text{id-i} \)

\[\text{he with-1S}\]

‘He is with me’

\[(24)\] \( \text{amla} \) \( \text{keği} \) \( \text{šwiya} \) \( \text{id-i} \) \( \text{ḥimaya} \)

\[\text{now:EL you:MS bit with-1S safety}\]

‘Now, you are a bit of safety to me.’
The prepositions am ‘like’ and nešt n ‘as big as’ can form similative predicates:

(25) ṣulḍi am lfrank = ahen
old.coin like franc = S:ANP
‘The ṣulḍi (old type of coin) is like that franc.’

(26) netta nešt n uebbiz
he like of cow:EA
‘He is (as big) as a cow.’

2.4. The adverbial predicate

Examples (27), (28) and (29) show adverbial predicates with different kinds of subjects, a nominal (27), a pronominal (28) and a demonstrative (29).

(27) lɛaṛt = ad ssiha
bull = S:PRX from.here
‘That is a lot/too much/too many.’

(28) nuḵna ssiha
we from.here
‘We are from here.’

(29) uphiḏ ssiha
M-PRX:PL from.here
‘These are from here.’

The adverb das ~ dan ‘there’ is used in adverbial predicates. The subject follows the predicate, for example:

(30) das ya n yaɣer
there one:M of meadow:EL
‘There is one field.’

(31) das yah lbelca n taliwan
there one:F many of sources
‘There are many sources.’

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2.5. The existential predicate

For existential predicates the borrowed Arabic element *kayen/kayna/kaynin* ‘there is/exists’ is used. It has the morphological scheme of an active participle, however it only functions as a marker of the existential predicate. It cannot modify a noun, it does not function as a noun nor does it take the relative form. In non-marked phrases the subject follows the element *kayen*. Gender and number agreement with the subject are optional irrespective of the position of the existential predicate (preceding or following the subject). Some examples are:

(32)  *kayen tasarka n līgeld n wífet*, *kayen tasarka n lībuţa n lgumma*

EXST shoe:EL of leather of cow EXST shoe:EL of tube of rubber

‘There exists a cow leather shoe and there exists a rubber shoe.’

(33)  *kayn-a yah lmetmura*

EXST-FS one:F grain.storage

‘There exists one grain storage.’

(34)  *kayen nnţum ttuţu-n*

EXST stars go:I-3PL

‘There exist stars that move.’

There exists an element *ka* which is used in the idiomatic expressions, *ma ka ya* ‘there is only’. This is probably a short variant of *kayen*, for example:

(35)  *i netta i-sekṛ=as s umţer ma ka ya ha*

and he 3MS-do:P = 3S:IO with sickle:EA NEG EXST only PRES

‘And he did like this with the sickle. (lit. there exists only *ha* = presentative ‘here’)

2.6. The pronouns haw / hay / ham

The third person pronouns *haw / hay / ham* can be used in non-verbal as well as in verbal constructions. There are no first and second person forms. These pronouns function as present relevance markers, meaning that they indicate that what is said, is applicable to or relevant at the present moment (cf. Mourigh & Kossmann, forthcoming, for the Tarifiyt particle *qa* which has similar semantics). In texts they are often found with locative constructions, which often have present relevance, although they are not obligatory. For other non-verbal predicates the pronouns have the same function. *Haw/hay/ham* is

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128 In Moroccan Arabic it functions as a locative as well as an existential (cf. Caubet 1993: 34-35).
consistently used in our corpus in sentences with the adverb *baqi / baqqa / baqin* ‘still’ (examples (39) and (40)). This is no wonder, as *baqi* (etc.) indicates that the event is still relevant in the present. Some examples of the present relevance marker are:

(36) *iḵenniwen ham das*  
  twins PR:3PL there  
  ‘The twins they are there.’

(37) *ana ye-ll a ṣeḥḥa?* iqqr = as: *‘haw ḡ ḫbir.’*  
  where 3MS-be:P o Jeha say:I=3S:IO PR:3MS in well  
  ‘Where is he, Jeha?’ He says: ‘He is in the well.’

(38) *inn=as: ‘ana he-ll?’ inn=as: ‘hay dan berṛa.’*  
  say:I=3S:IO where 3FS-be:P say:I=3S:IO PR:3FS there outside  
  ‘He said: ‘Where is she?’ He said: ‘She is there outside.’

(39) *imeẓwacen, ham baqi imeẓwacen*  
  starvelings, PR:3PL still starvelings  
  ‘Starvelings, they are still starvelings.’

(40) *te-qqel tasa, hay baqq-a tasa.*  
  3FS-become:P cow:EL PR:3FS still-FS cow:EL  
  ‘She turned into a cow, she is still a cow.’

2.7. Expressions with presentative *ha*, and *eend- ‘look out’*

The presentative *ha* is used to present something (cf. Lafkioui, 2011:46).

(41) *ha t-haad a sigi*  
  PRES F-S:PRX o sir  
  ‘Here is this one, sir.’

*eend*- ‘look out’ is borrowed from Arabic and always takes the Arabic series of prepositional pronouns (cf. III.11.5. on borrowed pronouns).

(42) *eend-ek*  
  at-2MS  
  ‘look out’
2.8. Negation of non-verbal predicates

There are two ways in which non-verbal predicates can be negated. Nominal, adjectival, prepositional, adverbial locative and existential predicates can all be negated by the negative particle maši which has the free variants mawši ~ mayši. This negative particle precedes the predicate. This negator is used to extend the scope of the negation to the whole clause. Furthermore, adjectival predicates, pronominalised prepositional predicates and one type of adverbial predicate can be negated by means of the discontinuous negation [ma predicate ši]. While it is the normal verbal negator, in non-verbal predicates the discontinuous negator is used ‘dans des situations polémiques, pour répondre à un éconcé antérieur’ (Caubet, 1996:82) like in Moroccan Arabic. The verb ll ‘to be’ can always be placed between [ma predicate ši] yielding [ma ll predicate ši]. ll always precedes the negated element. In the following examples the negation of each type of predicate is presented.

2.8.1. The nominal predicate

In the following examples some of the variants of the negative particle are illustrated.

(43) nihma mayši ieraḥen
     they NEG Arabs
     ‘They are not Arabs. (i.e. from the village of Ieraḥen)’

(44) nihma ma lla-n ši ieraḥen
     they NEG be:P-3PL NEG Arabs
     ‘They are not Arabs. (i.e. from the village of Ieraḥen)’

(45) t-had maši yemma
     F-S:PRX NEG mother
     ‘This is not my mother.’

2.8.2. The adjectival predicate

There are two possibilities for negating adjectival predicates, as in the examples below. The first and most frequently occurring possibility is negation by means of the negator maši which precedes the predicate. In (46) and (47) this is shown. The second possibility is the discontinuous negation ma...ši, as illustrated in (48) and (49). The third possibility is using the discontinuous negation in combination with the verb ll ‘to be’ in (50).
2.8.3. The prepositional predicate

Pronominalised and non-pronominalised prepositional predicates, use the constructions [ma predicate ši], [ma ll ši] or [maši]. A few prepositions do not take pronominal suffixes (cf. III.13.). They can only be negated by means of maši. The genitive preposition n optionally links the postverbal negative element ši to a lexical complement which follows the possessive predicate (cf. IV.3.4. on verbal negation). Examples (51) - (53) show pronominalised prepositional predicates, while (54) - (59) shows non-pronominalised examples of the locative, genitive and simulative predicates.

(51) ma yr-es ši n tţenniţt
    NEG at-3S NEG of tail:EA
    ‘He does not have a tail.’

(52) ma ga-m ši n lţuhd
    NEG in-2FS NEG of strength
    ‘He does not have any strength.’

(53) ma ga-s ši taţunt
    NEG in-3S NEG fat:EL
‘It has no fat.’

(54) *axyam maši g umaras*
    house:EL NEG in riverbed:EA
    ‘The house is not in the riverbed.’

(55) *axyam ma g umaras ši*
    house:EL NEG in riverbed:EA NEG
    ‘The house is not in the riverbed.’

(56) *netta ma ye-ll ši s tammart*
    he NEG 3MS-be:P NEG with beard
    ‘He did not have a beard.’

(57) *ma s tammart ši*
    NEG with beard NEG
    ‘He did not have a beard.’

(58) *ṣulḍi maši am lefrank=ahen*
    old.coin NEG like franc=S:ANP
    ‘A ṣulḍi (an old type of coin) is not like that franc (money).’

(59) *netta maši nešt n uxeyyal=ahen*
    he NEG like of boy:EA=S:ANP
    ‘He is not as big as that boy.’

The following examples show that negation of genitive and comitative predicates can use both the negative particle *maši / ma yell ši* (or one of the free variants) or the discontinuous negative particle *ma...ši* before the predicate.

(60) *maši nn-es*
    NEG of-3S
    ‘It is not his/hers.’

(61) *ma nn-es ši*
    NEG of-3S NEG
    ‘It is not his/hers.’

(62) *maši n lkayet*
NEG of paper
‘not (made) of paper’

(63) netta maši id-i
he NEG with-1S
‘He is not with me.’

(64) netta ma id-i ši
he NEG with-1S NEG
‘He is not with me.’

(65) netta ma yell kma-s ši
he NEG with brother-3S NEG
‘He is not with his brother.’

2.8.4. The adverbia1 predicate
The locative adverbia1 predicate can be negated by means of the continuous and the discontinuous negative marker, for example:

(66) nukna maši ssiha
we NEG from.here
‘We are not from here.’

(67) nukna ma ssiha ši
we NEG from.here NEG
‘We are not from here.’

(68) nukna ma n-ell ši ssiha
we NEG 1PL-be:P NEG from.here
‘We are not from here.’

(69) ma das ši bezzaf n medden
NEG there NEG many of people
‘There are not many people.’

2.8.5. The existential predicate
Negation of existential predicates is achieved by the discontinuous negator ma...ši, for example in (70). The continuous negator maši extends the scope to the entire clause, for example in (72).
(70) ma kayen šī ssācā
NEG EXST NEG clock
‘There is no clock.’

(71) ma he-ll kayn-a šī ssācā
NEG 3F-be:P EXT-FS NEG clock
‘There is no clock.’

(72) mašī kayen ssācā
NEG EXST clock
‘It is not that there is no clock.’
3. The verbal predicate
In this chapter the verbal predicate is discussed. It is divided in four main parts; the verb and its arguments, verbal valency and derivation, clitic position and negation. In the first section, the core arguments will be discussed first after which obliques will be discussed. In the second paragraph valency increasing and valency decreasing operations are the subject of discussion. Ghomara Berber has a number of labile verbs which are restricted to Berber-morphology verbs. In the paragraph on clitic position the contexts in which attraction takes place are discussed. In a separate section the behaviour of the deictic clitic d / id will be discussed. The combination of the clitics in pre- and postverbal will be discussed in the final section of this paragraph and finally the negation of the verbal predicate will be treated.

3.1. The verb and its arguments
There is a basic distinction between transitive and intransitive verbal predicates. In sentences with intransitive predicates the only argument is the subject, while transitive predicates have an object in addition to a subject. As these arguments can undergo changes by means of voice operations we consider them core arguments. In addition to the subject and object, some verbs take an indirect object. We consider indirect objects, prepositional arguments, as well as obligatory secondary predicates oblique grammatical arguments (cf. Andrews, 2007: 157). All other types of elements are considered adjuncts and fall outside of the scope of the verbal predicate. Arabic-morphology and Berber-morphology verbs behave in the same way and are treated together. Participles and other constructions are treated separately.

3.1.1. Core arguments

3.1.1.1. Subject
The subject argument is in the first place expressed by the verbal affixes which obligatorily accompany the verb. The main reason for treating the verbal affixes as the primary expression of the subject is the fact that the verb on its own can constitute a complete verb phrase. A lexical subject (pro)noun can precede or follow the verb. The lexical subject may be expressed in an NP following the verb or, in topicalisation, preceding it. The obligatory conjugational affix functions as the subject. As the subject is attached to the verb, a single verb can constitute a full clause, for example:

(1) i-ggez

129 In a seminal paper Galand (1964) denies the existence of a lexical subject and calls the ‘subject’ in topic position the *indicateur de thème* while in the postverbal position it is the *complément explicatif* (for an elaboration see Mettouchi, 2007).
‘He went down.’

(2) *eṭeš-t*
be.thirsty-1S:PF
‘I am thirsty.’

Example (3) and (4) show the lexical subject in pre- and postverbal position. Different from many Berber languages, the lexical subject does not take the *état d’annexion* in postverbal position. The lexical subject, in pre- and postverbal position, agrees in number and gender with the verb.

(3) *aḡḏi* *i-ffey*
jackal:EL  3MS-go.out
‘The jackal went out.’

(4) *i-dda* *argaz*
3MS-go:P  man:EL
‘The man left.’

(5) *aḡḏi* *ka-ye-hmeq*  *ya* *x*  *tyaṭen*
jackal:EL  IMPP-3MS:IMPF-go.crazy  only  on  goats:EA
‘Well, the jackal is just crazy for goats.’

(6) *ka-ye-hmeq*  *aḡḏi*  *ya*  *x*  *tyaṭen*
IMPP-3MS:IMPF-go.crazy  jackal:EL  only  on  goats:EA
‘Well, the jackal is just crazy for goats.’

When a lexical subject is followed by two coordinated singular nouns there can be singular and plural agreement. Example (7) shows singular agreement while example (8) shows plural agreement in the same context.

(7) *i-dda* *ašnikæf*  *iy*  *uḡdi*
3MS-go:P  hedgehog:EL  and  jackal:EA
‘The hedgehog and the jackal went’

(8) *dda-n* *ašnikæf*  *iy*  *uḡdi*
go:P-3PL  hedgehog:EL  and  jackal:EA
‘The jackal and the hedgehog went’
The same is true for Arabic-morphology verbs; there is no necessary agreement in number with a post-verbal coordinated singular subject nouns. In (9) the verb shows singular agreement with a plural subject noun.

(9) ka-ye-nbaɛ tteffəh i lbanan das
IMPP-3MS:IMPF-be.sold apple and banana there
‘Apples and banana’s are sold there.’

(10) ka-ye-nbaɛ-u tteffəh i lbanan das
IMPP-3PL:IMPF-be.sold-3PL:IMPF apple and banana there
‘Apples and banana’s are sold there.’

However, when two noun phrases are coordinated in preverbal position there is always plural agreement on the verb.

(11) aḡdi i ušnikef ṣaf-ren
jackal:EL and hedgehog:EA travel:P-3PL
‘The jackal and the hedgehog travelled’

(12) tteffəh i lbanan ka-ye-nbaɛ-u das
apple and banana IMPP-3PL:IMPF-be.sold-3PL:IMPF there
‘Apples and banana’s are sold there.’

Just like nouns, independent pronouns appear preceding or following the verb. They can add emphasis (cf. III.11.1. for independent pronouns). For example:

(13) netta i-nṭer
he 3MS-fly:P
‘He flew away.’

(14) i-nṭer netta
3MS-fly:P he
‘He flew away.’

The relative form has one form and does not show agreement with the subject (cf. III.7.4. morphology). Compare the following examples.

(15) amaleḥ a ye-nwa-n i netta
fish:EL REL RF-be.cooked:P-RF to he
‘the cooked fish is for him’

(16) *leḥšam a ye-dda-n dar lmeḍraša lekm-en amilla*

children REL RF-go:P-RF to school reach:P-3PL now

‘The children that went to school have arrived by now.’

Arabic participles agree in gender and number with the subject (cf. III.10. for the morphology of participles). For example (17) with preceding subject and (18) with following subject.

(17) *aḡdı iḍ ušniket mažy-in*  

jackal:EL and hedgehog:EA come:AP-PL

‘The jackal and the hedgehog are coming.’

(18) *mažy-in aḡdı i ušniket*  

come:AP-PL jackal:EL and hedgehog:EA

‘The jackal and the hedgehog are coming.’

With a coordinated subject, the participle can have singular agreement when it precedes it, but not when it follows it, for example:

(19) *maži aḡdı i ušniket*  

come:AP:MS jackal:EL and hedgehog:EA

‘The jackal and the hedgehog are coming.’

There exist impersonal verbs which do not have lexical subject agreement. Among these are auxiliary verbs such as *xeṣṣ* ‘to have to, to need’ as in the examples below, which has optional PNG marking. It is often, though not necessarily, accompanied by an indirect object pronoun.

(20) *xeṣṣ =aḵ ilaxirihi myatayn n rryal*  

need:P =2MS:IO etc two.hundred of rial

‘You need moreover two hundred rial.’

(21) *i nihma xeṣṣ =asen a t=nyu-n*  

and they need:P =3PL:IO AD 3FS:DO =kill:A-3PL

‘And they want to kill her.’
The impersonal verb distinguishes different aspectual forms. The following example shows the Imperfective form. In (22) it is accompanied by a topicalised pronoun and a subject pronoun.

(22)  
\[
\begin{array}{cccc}
 &  i & \text{nett} & i-\text{txess} = as & \text{nett} \\
\text{and} & \text{he} & 3\text{MS-need:1} = 3\text{S:IO} & \text{he}
\end{array}
\]
‘And he needs him.’

Another impersonal verb with Arabic morphology is the verb \( \text{tar} \ - \ \text{iṭiṛ} \) ‘to be fed up, to get angry’, which is always feminine singular. This verb is used with an obligatory indirect object pronoun which agrees with the subject.

(23)  
\[
\begin{array}{cccc}
 & \text{tar-eṭ} = l-u & \text{aḡdi} \\
\text{fly-3FS:PF} = 1\text{O-3MS} & \text{jackal:EL}
\end{array}
\]
‘The jackal got fed up.’

3.1.1.2. Direct object

Transitive and ditransitive predicates have a direct object argument. The direct object can be a pronoun or a noun (see III.11.2.1. for direct object pronouns). For example the following Berber-morphology (24, 25) and Arabic-morphology verbs (26, 27).

(24)  
\[
\begin{array}{cccc}
 & \text{ttf-en} & \text{aḡdi} \\
\text{grab:3PL} & \text{jackal:EL}
\end{array}
\]
‘They caught the jackal.’

(25)  
\[
\begin{array}{cccc}
 & \text{ttf-en} = t \\
\text{grab:3PL} = 3\text{MS:DO}
\end{array}
\]
‘They caught him.’

(26)  
\[
\begin{array}{cccc}
 & \text{tlaqi-t} & \text{ḥmeḍ} \\
\text{meet-1S:PF} & \text{Ahmed}
\end{array}
\]
‘I met Ahmed.’

(27)  
\[
\begin{array}{cccc}
 & \text{tlaqit} = u \\
\text{meet-1S:PF} = 3\text{MS:DO}
\end{array}
\]
‘I met him.’
The lexical direct object can stand in topic position and precede the verb. In that case pronominal reference by means of a direct object pronoun is obligatory on both Berber- and Arabic-morphology verbs (see IV.7.1. for topicalisation). For example:

(28) ɣyul umr-en = t Šurkan
donkey:EL send:P-3PL = 3MS:DO peasants
‘The peasants sent the donkey.’

(29) tameṭṭut = ahen tlaqa-ha argaz nn-es
women:EL = S:ANP meet[:3MS:PF]-3FS:DO man:EL of-3S
‘That women, her husband met her.’

A number of transitive verbs like Šš ‘eat’ and su ‘drink’ can occur without an explicit indirect object argument as shown in example (30) and (31).

(30) i-Šš lmakla
3MS-eat:P food
‘He ate food.’

(31) i-Šš
3MS-eat:P
‘He ate.’

3.1.2. Obliques
Indirect objects, prepositional arguments and secondary predicates fall under this category of obliques. Phrases occurring with verbs which are not idiosyncratically determined by verbal predicates are considered external functions and will not be discussed here.

3.1.2.1. Indirect object
A number of verbs select for an indirect object to express the recipient in a ditransitive construction. When the indirect object is expressed lexically, it is preceded by the preposition i ~ id ‘to’. Lexical indirect objects are often (but not obligatorily so) doubled by a coreferential indirect object pronoun, cf. example (32) and (33), which are equally acceptable. Expressing both of them simultaneously like in (33) is the preferred option, however.

(32) i-fk = at i ya tmeṭṭut
3MS-give:P = 3MS:DO to one:F woman:EA
‘He gave it to a woman.’
When both a lexical direct object and a lexical indirect object is present, the orders direct object - indirect object and indirect object - direct object are equally possible, e.g.:

(33) \( i·fk = as = t \quad i \quad ya \quad tmeṭṭ ṭu \)
3MS-give:P = 3S:IO = 3MS:DO to one:F woman:EA
‘He gave it to a woman.’

(34) ħmed \( i·fk = as \quad leflus \quad i \quad urgaz = ahen \)
Ahmed 3MS-give:P = 3S:IO money to man:EA = S:ANP
‘Ahmed gave that man money.’

(35) ħmed \( i·fk = as \quad i \quad urgaz = ahen \quad leflus \)
Ahmed 3MS-give:P = 3S:IO to man:EA = S:ANP money
‘Ahmed gave that man money.’

Examples (36) and (37) show the use of both orders without the indirect object pronoun.

(36) ħmed \( i·fk \quad i \quad urgaz = ahen \quad leflus \)
Ahmed 3MS-give:P = 3S:IO to man:EA = S:ANP money
‘Ahmed gave that man money.’

(37) ħmed \( i·fk \quad leflus \quad i \quad urgaz = ahen \)
Ahmed 3MS-give:P = 3S:IO money to man:EA = S:ANP
‘Ahmed gave that man money.’

The indirect object can be used to imply involvement of the participant without direct participation in the event, often to be interpreted as benefactive or malefactive. For example in (38) (cf. Rapold, 2010):

(38) \( i·bb = ak = tet \)
3MS-take = 3MS:IO = 3FS:DO
‘He took it for you (or: to your detriment).’

Benefactives and malefactives do not allow the preposition \( i \) without doubling by a pronominal clitic. In the following two examples the intransitive reading of a labile verb is used, meaning that afus ‘hand’ is the subject. Example (39) is ungrammatical, and (40) is the only correct wording of the sentence.
(39) *i-reẓ afus i ḥmed
3MS-break:P hand:EL to Ahmed
‘Ahmed broke his hand.’

(40) i-reẓ =as afus i ḥmed
3MS-break:P=3S:IO hand:EL to Ahmed
‘Ahmed broke his hand.’

Example (41) is an example of a transitive phrase, where ṭṭunubir ‘car’ is the direct object.

(41) i-reẓ =as ṭṭunubir i urgz =ahen
3MS-break:P=3S:IO car for man:EA=S:ANP
‘He broke that man’s car.’

Arabic-morphology verbs use the prepositional pronoun l as the marker of the pronominalised indirect object, which is borrowed as part of the verbal complex (cf. chapter III.11.5. on pronouns). It functions as an indirect object pronoun accompanying the verb. In examples (42) and (43) it is shown that it is involved in the same non-obligatory doubling strategies as found with Berber-morphology verbs.

(42) tteṭa-w =l-u leflus i ilyas
be.given-3PL:PF=to-3MS money to Elias
‘The money was given to Elias.’

(43) tteṭa-w leflus i xana =yahen
be.given-3PL:PF money to man=S:ANP
‘The money has been given to that man.’

The type of indirect object which is not an argument is found with Arabic-morphology verbs as well, for example:

(44) mḵi ewaẓ-u =l-u
if be.crooked-3PL=to-3MS
‘If they stray off (to his detriment).’

Interestingly, the strict rule on using indirect object doubling with malefactive/benefactive expression found with Berber-morphology verbs does not obtain with Arabic-morphology verbs. The following phrases are all grammatical:
3.1.2.2. Prepositional argument

It is often difficult to argue for or against the argumental status of a prepositional argument. A number of verbs in Ghomara Berber take an obligatory prepositional argument, for example the following verbs.

(48) ʾa sellem x yemma
     AD [3FS]-greet:A on mother
     ‘She will greet my mother.’

(49) tḥerrak-en x medden
     lie:1-3PL on people
     ‘They lie to people.’

In most cases the prepositional phrase is an oblique argument, e.g.

(50) ʾ a qett-r-en ftx-essen
     FUT AD drip:A-3PL on-3PL
     ‘They will drip on them.’

3.1.2.3. Secondary predicates

A verbal or non-verbal predicate can follow a coreferential (affixal) subject or direct object pronoun. In Strigin’s terms who sums up Jespersen’s hypothesis about secondary predicates (called nexus-arguments by Jespersen), ‘a secondary predicate is a predicate embedded in a clause that is conjoined with the clause containing the primary predicate’ (Strigin, 2008: 382). Only a select group of verbs such as af ~ uf ‘to find’, rri ‘to make (become)’, qqu ‘to become, to return’, ʷ g ‘to let, to leave’, bdu ‘begin’, ṭah ‘to start and continue’, qqim ‘to sit, to remain’ ṣr ‘to see’ and sell ‘to hear’, allow for a secondary predicate. Secondary
predicates can be subjective or objective, depending on the transitivity of the primary predicate. They cannot be substituted by a pronoun; substitutes are always adverbs (esp. hamḵa ‘like this, in this way’). Verbs in secondary predication take normal inflection and can take the same aspectual form as the main verb. The basic criterion to identify a clause as a secondary predicate is the continuation of the intonation contour and the general meaning of the sentence, which is different when there are two separate sentences. For example the next Ghomara sentence (51) has one single intonation contour. The intonation contour assures the coherence between the two predicates. The meaning is different if there is an intonation break after the first verb (indicated by the comma), as shown in example (52):

(51) qqim-en tyewwat-en kaml-in
stay:P-3PL scream:I-3PL all-PL
‘All of them kept on screaming.’

(52) qqim-en, tyewwat-en kaml-in
stay:P-3PL scream:I-3PL all-PL
‘They sat down, (while) all of them were screaming.’

In the following examples the difference between a direct object and a secondary predicate is shown. In (53a) argaz ‘the/a man’ is not the direct object argument of the verb (cf. 53b), but a non-verbal predicate.130 In (53c) the argument is a verbal secondary predicate.

(53a) i-qqel argaz
3MS-become:P man:EL
‘He became a man.’

(53b) *i-qqel = at
3MS-become:P = 3MS
‘*He became it.’

(53c) i-qqel i-ttiṭu
3MS-become:P 3MS-go:I
‘He was able to walk (again).’

Example (54a) shows an object complement. It can not be considered a double direct object, as the noun phrase following the direct object pronoun cannot be substituted by a direct

---

130 The whole phrase is marked by a rising intonation pattern. This is important because when the intonation pattern is rising until the end of the verb and lower over the the noun, the meaning is ‘the man returned’.
object pronoun. The substitution of the noun is achieved by means of the adverb hamḵa in (54b).

(54a) \( i\text{-}rry = at \quad \text{argaz} \)
3MS-return:P = 3MS:DO \quad \text{man:EL}
‘He made him a man.’

(54b) \( i\text{-}rry = at \quad \text{hamḵa} \)
3MS-return:P = 3MS:DO \quad \text{like.this}
‘He made him like this.’

Secondary predicates can be verbal as well as non-verbal. Some examples are:

(55) \( i\text{-}ttaf = at \quad \text{mžebbed} \)
3MS-find:I = 3MS:DO \quad \text{stretch:PP:MS}
‘He finds him lying flat.’

(56) \( i\text{-}zr = at \quad \text{i-ttiğu} \)
3MS-see:P = 3MS:DO \quad 3MS-go:I
‘He saw him walking.’

(57) \( i\text{-}ttaf = at \quad \text{ya} \quad \text{zzayn} \)
3MS-find:I = 3FS:DO \quad \text{only beauty}
‘He finds that she is a beauty.’

(58) \( i\text{-ffeɣ} \quad \text{mkellex} \)
3MS-go.out:P \quad \text{be.backward:PP:MS}
‘He turned out to be backward.’

(59) \( i\text{-qqel} \quad \text{i-ṣha} \)
3MS-become:P \quad 3MS-heal:P
‘He became better.’

(60) \( ḫda\text{-}n \quad rri\text{-}n \quad \text{ibawen} \)
begin:P-3PL \quad \text{sow:P-3PL} \quad \text{beans}
‘They started to sow beans.’

(61) \( \text{he-ḥda} \quad \text{te-ẓẓeḡ} \quad \text{tarekkalt} \)
3FS-begin:P \quad 3FS-milk:P \quad \text{dog:EL}
'She began milking the dog.'

(62) ũda-n daxl-in ssysan i ssysan i ssysan
begin:P-3PL enter:AP-PL from.here and from.here and from.here
‘They started to enter from here and there.’

(63) ũda-n a kerz-en
begin:P-3PL AD plough-3PL
‘They began ploughing’

(64) dda-n dar urrar, ṭah-u teddz-en
go:P-3PL to threshing.floor:EA begin-3PL:PF pound:1-3PL
‘They went to the threshing floor and started pounding.’

(65) eawed ṭaw ṭah-u ka-y-stcml-u eawed
again again begin-3PL:PF IMPP-3PL:IMPF-use-3PL:IMPF again
‘Then they started using…’

(66) ṭah maši, i-ttaf ya tmeyra
begin[:3MS:PF] go:AP:MS 3MS-find:I one:F wedding:EA
‘He went and encountered a wedding.’

(67) ṭah i-n降低成本 a weddi, a ḥāha, nda daye ttueban
begin[:3MS:PF] 3MS-say:P = 3S:IO o boy o father go at cobra
‘He started telling him: ‘My father, go to the cobra.’

The verbs do not necessarily follow each other immediately. A topicalised noun can be placed in between, for example:

(68) saca ṭah-u ifulusen bherrah-en, iṭan sett-en
then begin-3PL:PF roosters yell:1-3PL dogs bark:1-3PL
‘The roosters started yelling, the dogs barking.’

The verb qqim ‘to sit, to stay’ is a durative auxiliary verb that indicates that an action spans a certain amount of time. The auxiliary verb can only be followed by the Imperfective or the active participle, for example:

(69) i-qqim i-hemmu, qqima-n hemmu-n
3MS-stay:P 3MS-heat.up:1 stay:P-3PL heat.up:1-3PL
'He kept on heating up, they kept on heating up.'

(70) i-dda, i netta i-qqim maši yiḏ-es genna
3MS-go:P and he 3MS-stay:P go:AP:MS with-3S sky
‘He went, he kept on going with him in the sky.’

The verb **af ~ uf** ‘to find’ can take an Imperfective, a Perfective, and passive and active participles as complements, as shown in the following examples:

(71) y-ufa leafya mešʿul-a
3MS-find:P fire light:PP-FS
‘He found that the fire was lit.’

(72) tameṭṭut nn-es, t-taf = aṯ mżebed ḥ
woman:EL of-3S 3FS-find:I = 3MS:DO stretch:PP:MS
‘His wife found him lying.’

(73) i lyula = yahen teFFEyya berṛa, he-ttaf = ahen gals⁻in
and ogress = S:ANP 3FS-go.out:P outside 3FS-find:I = S:ANP sit:AP-PL
‘And the ogress went out and (suddenly) found them sitting.’

(74) i-ttaf i-yres ḥadiḵ = ahen
3MS-find:I 3MS-slaughter:P thing = S:ANP
‘He found that he had slaughtered that thing.’

Most secondary predicates are joined to the matrix verb without a complementiser, although it is possible to use the complementisers **billa** and **illa** for clausal complementation, but they are optional and only rarely attested in texts. The complementisers are attested with verbs of utterance, verbs of perception and verbs of knowledge. The following examples are all grammatical.

(75) i-caql = at billa tameṭṭut = ahen
3MS-recognise:P = 3FS COMP woman:EL = S:ANP
‘He recognised her to be that woman.’

(76) i-caql = at tameṭṭut = ahen
3MS-recognise:P = 3FS woman:EL = S:ANP
‘He recognised her to be that woman.’
In the case of the verb *ssen* ‘to know that, to know how to’ (knowledge predicate) the use of the complementiser allows for the complement verb to have a different subject and different aspectual forms, compare for example (79) and (80) (cf. also Cadi, 1987: 81-82 for Riffian). Without the complementiser only a + Aorist is allowed after this verb, and the meaning is different.

(79) *ḥmeḏ i-ssen illa a sek-r-en ṭṭam*

ahmed 3MS-know:P COMP AD make:A-3PL couscous

‘Ahmed knows that they will make couscous.’

(80) *ḥmeḏ i-ssen a sekker ṭṭam*

ahmed 3MS-know:P AD [3MS-]make:A couscous

‘Ahmed knows how to make couscous.’

### 3.2. Verbal valency and derivation

There exist intransitive, transitive, ditransitive and labile verbs in Ghomara Berber. The valency of the verb can be changed by means of formal operations on the verb, including systematic suppletion. Labile verbs have two valencies without formal change of the verb. Valency increase to derive the causative can be achieved by two formal operations: a number of verbs take an *ss ~ s* prefix, while other verbs geminate the second consonant, i.e. take the form of an Arabic stem II verb (see 3.2.1.2. below)\(^{131}\). Rarely one finds stems with insertion of an *a* (Arabic stem III) to form a causative. Most causatives are derived from intransitive verbs (both *ss ~ s* and geminated verbs), whereas only a few transitive verbs have a causative (only geminated verbs). The passive is always formed by *t ~ n* derived Arabic-morphology forms (see 3.2.2. below).

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\(^{131}\) A causative consists of a complex situation as defined by Kulikov (2001: 886): ‘verbs which refer to a causative situation, that is, to a causal relation between two events, one of which (P2) is believed by the speaker to be caused by another(P1). Syntactically the subject of the intransitive becomes the object of the transitive causative verb while there is morphological marking or suppletion of the verb (different from labile verbs which do not have any morphological marking whatsoever).’
3.2.1. Valency increasing operations

3.2.1.1. ss ~ s prefix

The ss ~ s prefix has limited productivity. It is only used to form a causative within a limited set of Berber-morphology verbs (see III.7.7. morphology). Arabic-morphology verbs never occur with this prefix. No transitive verbs take the ss ~ s prefix. Some examples of verbs that take the ss ~ s prefix are:

<table>
<thead>
<tr>
<th>Perfective</th>
<th>Perfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>i-nes ‘it is extinguished’</td>
<td>i-s-nes ‘he extinguished’</td>
</tr>
<tr>
<td>i-ffy ‘he went out’</td>
<td>i-ss-afey ‘he let/made him go out’</td>
</tr>
<tr>
<td>i-kku ‘it dried’</td>
<td>i-ss-ku ‘he dried’</td>
</tr>
</tbody>
</table>

The only instance of a different use of the ss ~ s prefix is in ss-xkuḥ ‘to cough’. This verb corresponds to the Arabic verb kuḥ ‘to cough’, but it does not have a non-derived counterpart in the language. The verb does not have a causative meaning, but may be a unique instance in Ghomara of a verbalisation of an onomatopoea 132.

3.2.1.2. cCc causative

All cCc (stem II) verbs belong to the Berber-morphology class. The cCc (and cacc) verbs are considered causatives if they have a causative meaning in opposition with a non-derived form (cCc verbs have many other functions, see III.7.). Virtually all cCc verbs have an Arabic origin. The non-derived verb can belong either to the Arabic-morphology class or the Berber-morphology class. The interplay between non-derived Arabic- and derived Berber-morphology verbs is shown in the following (all examples are in the Perfective).

<table>
<thead>
<tr>
<th>Non-derived</th>
<th>Causative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arabic-morphology</td>
<td>Berber-morphology</td>
</tr>
<tr>
<td>wžeqd ‘be ready’</td>
<td>weqeqd ‘make ready’</td>
</tr>
<tr>
<td>rreeš ‘shiver’</td>
<td>reeqeqš ‘cause to shiver’</td>
</tr>
<tr>
<td>zeem ‘dare’</td>
<td>zeeqeqem ‘make dare’</td>
</tr>
</tbody>
</table>

132 In addition to its function as a causativeriser, in many Berber languages the ss ~ s prefix has the (limited) function of a verbaliser of onomatopoeia and nouns (cf. Kossmann, 2012: 23). An often cited examples is the verb siwel ‘to talk’ which is derived from the noun awal ‘word’. In Ghomara, the verb siwel is attested, but the corresponding noun does not exist (The Arabic borrowing lkelma ‘a word, speech’ is used).
There are also many causatives that are derived from verbs with Berber-morphology, e.g.

<table>
<thead>
<tr>
<th>Berber-morphology</th>
<th>Berber-morphology</th>
</tr>
</thead>
<tbody>
<tr>
<td>fṛeḥ</td>
<td>‘be happy’</td>
</tr>
<tr>
<td>ṣṭeḥ</td>
<td>‘dance’</td>
</tr>
<tr>
<td>dḥer</td>
<td>‘appear’</td>
</tr>
<tr>
<td>friq</td>
<td>‘separate’</td>
</tr>
<tr>
<td>lseq</td>
<td>‘stick’</td>
</tr>
<tr>
<td>ᵇeqel</td>
<td>‘recognise’</td>
</tr>
</tbody>
</table>

Berber roots with Berber etymologies can also take cCc causatives. In this case, not only the derivational process, but also the root of the causative is of Arabic origin. This results in suppletive pairs in which a non-derived etymologically Berber verb has an etymologically Arabic cCc causative counterpart, for example:\(^{133}\):

<table>
<thead>
<tr>
<th>Berber-morphology</th>
<th>Berber-morphology</th>
</tr>
</thead>
<tbody>
<tr>
<td>ḍeṣṣ</td>
<td>‘to laugh’</td>
</tr>
<tr>
<td>ssen</td>
<td>‘know’</td>
</tr>
<tr>
<td>rwel</td>
<td>‘flee’</td>
</tr>
<tr>
<td>wsir</td>
<td>‘be old’</td>
</tr>
<tr>
<td>ᵇṣuṭ</td>
<td>‘be afraid’</td>
</tr>
</tbody>
</table>

Rarely, one finds Arabic stem III verbs which have a causative meaning, for example:

<table>
<thead>
<tr>
<th>Arabic-morphology</th>
<th>Berber-morphology</th>
</tr>
</thead>
<tbody>
<tr>
<td>shel</td>
<td>‘be easy’</td>
</tr>
<tr>
<td>tlaqa(^{134})</td>
<td>‘to meet’</td>
</tr>
</tbody>
</table>

Some verbs allow for the ss ~ s causative and the (suppletive) geminated causative. In such cases, speakers indicate that cCc verbs are preferred and more frequent in speech. This suggests that there is an on-going decline of the productivity of the ss ~ s causative type. Compare the following pairs:

<table>
<thead>
<tr>
<th>Berber-morphology</th>
<th>Berber-morphology</th>
</tr>
</thead>
<tbody>
<tr>
<td>ḍeḏ</td>
<td>‘stop, stand’</td>
</tr>
</tbody>
</table>

\(^{133}\) The link between the pairs was established during fieldwork by trying to make an ss ~ s causative and instead getting these forms.

\(^{134}\) This is a t- derived form.
A very limited number of transitive verbs have a causative, which is always of the \textit{CcC}c type. These verbs differ semantically from other transitive verbs in that they have an affected agent, i.e., a subject argument which performs an action by which it is affected at the same time. According to Shibatani & Pardeshi (2001:95) such verbs ‘have a dual property of assigning both an agent and a patient role to the subject of the base verb.’ Verbs of this type are often ingestive verbs like ‘eating’ and ‘drinking’. Their valency is increased by one and the verb thus becomes a ditransitive. The underived verb can have Arabic or Berber morphology. Again, if the underived verb is etymologically Berber, the causative is suppletive, for example:

<table>
<thead>
<tr>
<th>Berber-morphology</th>
<th>Berber-morphology</th>
<th>Arabic-morphology</th>
<th>Berber-morphology</th>
</tr>
</thead>
<tbody>
<tr>
<td>šš ‘eat’ &gt; wekkel</td>
<td>‘feed’</td>
<td>su ‘drink’ &gt; šerreb</td>
<td>‘make/let drink’</td>
</tr>
<tr>
<td>qra ‘study’ &gt; qerra</td>
<td>‘teach’</td>
<td>fhem ‘understand’ &gt; fehhem</td>
<td>‘explain’</td>
</tr>
</tbody>
</table>

Causatives of transitive verbs have maximally three arguments. When all arguments are expressed in the ditransitive the subject of the non-derived verb becomes an indirect object (the causee). The original position of the subject is taken by the causer (the new subject). The original object remains in the original position. Compare examples (81) and (82). If the original direct object is not expressed the causee argument takes the direct object position, as in example (83).

(81) \textit{aeeyyal} \textit{nn-es} i-šš ayu\textit{mm}
boy:EL of-3S 3MS-eat:P bread:EL
‘His child ate bread.’

(82) \textit{fari\textbar} i-wek\textbar k\textbar l\textbar a\textbar yu\textbar m i ue\textit{eyyal} \textit{nn-es}
Farid 3MS-feed:P=3S:IO bread to child:EL of-3S
‘Farid fed bread to his child.’

(83) \textit{fari\textbar} i-wek\textbar k\textbar l \textit{aeeyyal} \textit{nn-es}
Farid 3MS-feed:P child:EL of-3S
‘Farid fed his child.’

3.2.2. Valency decreasing operation - the passive

The passive construction promotes the original object to subject position. The original subject is omitted. It cannot be expressed in any way in the passive clause. All passives are Arabic-morphology verbs which have a tt ~ t or an n prefix (for non-passive verbs with these prefixes, such as reciprocals, see III.8.3.). Similar to the situation with cCc causatives, underived etymologically Berber verbs use suppletive derived Arabic verbs in order to express the passive. In (84) the transitive verb krez ‘plough’ has a subject argument with an agent role and a direct object with a patient role. In (85) the subject is suppressed and the direct object of (84) is the subject. The verb in (84) has been supplanted by its passive suppletive counterpart tteḥṛet ‘to be ploughed’ in (85).

(84) i-krez  aḡer  nn-es
3MS-plough:P meadow:EL of-3S
‘He ploughed his field.’

(85) aḡer  nn-es tteḥṛet  azgażnet
meadow:EL of-3S PASS-plough[3MS:PF] last.year:EL
‘His meadow was ploughed last year.’

The following examples show the use of passives in texts. Examples (86) and (87) show tt ~ t derivations, while example (88) shows an n derivation.

(86) n-tawi = d  lḥebb  n-degg = at  g  lmeqla = yahen
1PL-take:1=DC barley, 1PL-put:1=3MS:DO in frying.pan=S:ANP
ne-qqely = at  iwa, netta  ka-y-tt-eqla
1PL-fry:1=3MS:DO well he IMPP-3MS:IMPF-PASS-fry
‘We take barley, we put it in that frying pan, we fry it, well, it is being fried’

(87) elahiṣeq  ka-t-t-hekk,  ka-t-t-hekk,  ššuka = yahen
because IMPP-3FS:IMPF-PASS-rub, IMPP-3FS:IMPF-PASS-rub, needle=S:ANP
‘because it is rubbed, it is rubbed, that needle’

(88) ma  aḡ  i-ll  ka-y-n-baḥ  zzit,  ma  aḡ
NEG PST 3MS-be:P IMPPP-3MS:IMPF-PASS-sell oil, NEG PST
i-ll  ka-y-en-baḥ  zzaytun  ma  aḡ  i-ll
3MS-be:P IMPPP-3MS:IMPF-PASS-sell olives, NEG PST 3MS-be:P
The following examples show an Arabic-morphology verb which corresponds to the root of the derived passive.

(89)  
\( \text{kra} \quad \text{axyam} \)  
\( \text{rent}[:3\text{MS}:\text{PF}] \quad \text{house:EL} \)  
‘He rented a house.’

(90)  
\( \text{tt-ekra} \quad \text{axyam = ahen} \)  
\( \text{PASS- rent}[:3\text{MS}:\text{PF}] \quad \text{house:EL = S:ANP} \)  
‘That house has been rented.’

3.2.3. Labile verbs

Labile (or: ambitransitive) verbs are verbs in which the subject argument (S) of the intransitive verb corresponds to the direct object (O) of the transitive verb (cf. Kulikov 2001 for an overview) without any formal change. In the following examples \( \text{lkas} \) ‘the glass’ is the subject in (91). In (92) an agent is present in subject position, and the object corresponds to the subject in (91).\(^{135}\) The intransitive has a resultative reading, while the transitive has a dynamic reading (see IV.8.1.2., cf. also Mettouchi, 2003c for Kabyle). Labile verbs never take the \( \text{ss} \sim \text{s} \)-prefix. All labile verbs have Berber morphology; many are Arabic stem II verbs as in example (93) and (94).

(91)  
\( \text{lkas} \quad i-\text{rez} \)  
\( \text{glass} \quad 3\text{MS-break:P} \)  
‘The glass is broken.’

(92)  
\( \text{argaz = ahen} \quad i-\text{rez} \quad \text{lkas} \)  
\( \text{man:EL = S:ANP} \quad 3\text{MS-break:P} \quad \text{glass} \)  
‘That man broke the glass.’

(93)  
\( \text{i-ceqqed} \)  
\( 3\text{MS-tie:P} \)  
‘it is tied’

\(^{135}\) Labile verbs in Ghomara Berber are S = O labiles as opposed to S = A (A = Agent) labiles (see Dixon & Aikhenvald, 2000).
Valency alternation of the labile type does not occur with Arabic-morphology verbs. Out of a total of approximately 615 Berber-morphology verbs in our corpus 70 are labile, which amounts to 11% of the verbs. Arabic which has very little labile verbs. In order to express state Arabic resorts to the use of the passive participle. As these have been massively borrowed in Ghomara Berber this may have led to the decline of the functioning of labile verbs. This can be illustrated by the differing opinions on the verb ḫta ‘divide’. For a speaker in his seventies this was a labile verb, however, for a younger speaker (around thirty) the verb was strictly transitive. Thus, for the older speaker both (95) and (96) are acceptable, whereas the younger speaker only accepted (96).

Instead of the intranstive the younger speaker uses the Arabic passive participle:

A further indication is that verbs which tend to be labile in other Berber languages, are strictly transitive in Ghomara (It is labile in Riffian and Kabyle Berber, though it is transitive in Tashelhiyt, see Galand, 2010: 294). An example of such a verb is ḫrez ‘to plough’. Example (98) can only have a transitive reading.

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136 This number is less than, for example, Chaker’s count of Kabyle labile verbs (250 verbs, 1983: 298) and Cadi’s count of Riffian (18% out of 850 verbs = 153 verbs, Cadi, 1987).
3.3. Clitic position

There are a number of clitics – known as satellites (Galand, 2010: 174-175) – that can be attached to the verb: the direct object, the indirect object and the deictic clitic $d / id$. The clitics have a set position in relation to the verb and cannot be separated from each other by any other element. The verb and the clitics together will henceforth be referred to as ‘the verbal complex’. Within the verbal complex, the clitics can be either in postverbal or in preverbal position. There are a number of contexts in which clitics assume preverbal position. This process is known as ‘attraction’ in the Berberological terminology. Below, all contexts in which this happens are discussed. It should be stressed that, although attraction is quite consistent in the relevant contexts, there is some variation as to its applicability. Speakers accept clitics in both post- and preverbal position after subordinating conjunctions and after AD ($š$, $a$, $d$ and $ar$). In relative constructions there is always attraction of verbal clitics. In texts, attraction mostly does apply in the relevant contexts. Conspicuously, all examples lacking attraction in the text corpus come from the youngest speaker who is in his late teens, but is a confident speaker of the language.\[137\] When the direct object and the indirect object are expressed at the same time, Ghomara allows for clitics in both pre- and postverbal positions, as will be discussed in section IV.3.3. Prepositions and adverbs do not undergo attraction and always remain in postverbal position.\[138\] Arabic clitics which accompany Arabic-morphology verbs do not participate in attraction and always maintain their postverbal position. In this section the three contexts in which attraction takes place will be discussed first, after which the combination of the clitics is presented (for the forms of the pronouns see III.11.). The deictic clitic $d / id$ and its interaction with the pronouns will be the final part of this paragraph.

3.3.1. Subordinating conjunctions

The following subordinating elements can cause attraction (cf. IV.4.2. for all subordinating particles).

nyā ~ yya ‘when’

(99)  

nyā  
t = ne-$n$ad

when  3FS:DO = 1PL-grind:I
‘When we grind it.’

(100) **nya y =zerri-n**

when 3MS:DO = pound:1-3PL

‘When they pound it.’

The following construction without attraction is possible as well.

(101) **nya ne-ẓẓaḍ aṯ**

when 1PL-grind:1 = 3FS:DO

‘When we grind it.’

**ḥetta** ‘until’

This subordinating particle can cause attraction as example (102) shows. Example (103) shows a text excerpt where attraction does not take place.

(102) **i-qqim i-kkaṭ ga-s, ḥetta t = i-ney**

3MS-stay:P 3MS-hit:I in-3S until 3MS:DO = 3MS-kill:P

‘He kept on beating him until he had killed him.’

(103) **i-qqim i-kkaṭ ga-s, ḥetta ye-ny = aṯ**

3MS-stay:P 3MS-hit:I in-3S, until 3MS-kill:P = 3MS:DO

‘He kept on beating him until he had killed him.’

### 3.3.2. Relative constructions

In relative clauses and in related constructions, such as interrogatives and cleft sentences, the relativiser **a** causes obligatory attraction of the verbal clitics (see IV.6. and IV.7.2.). In the following examples fronting of each of the clitics is shown.

(104) **šebbṛ-pen a rargaz a n = ye-wwt-en.**

capture:P-3PL man:EL REL 3PL:DO = RF-hit:P-RF

‘They caught the man who hit them.’

(105) **tayatt a s = i-qqer leeqel nn-es**

goat:EL REL 3S:IO = 3MS-say:I mind of-3S

‘The goat that he would like (lit. that his mind told him).’

(106) **nnṣaṛa a d = i-ttiṭu-n dar šžbala ma yer-sen ši leflus**

Europeans REL DC = RF-go:1-RFto Jbala NEG at-3PL NEG money
‘The Europeans who come to the Jbala don’t have any money.’

amḵ a ‘when’
The conjunction amḵ a is a type of relative construction.

(107) amḵ a hen =i-bb qríree = ahen
when REL 3PL:DO = 3MS:take:P baldy.person = S:ANP
‘When that baldy person took them.’

In some cases in our text corpus there is no attraction, and the clitics remain in the postverbal position after amḵ a ‘when’. This text excerpt is from a young, but confident speaker.

(108) amḵ a bba-n = tet dar ya tfarīt
when REL take:P 3PL = 3FS:DO to one:F pond:EA
‘When they took her to a pond.’

3.3.3. Preverbal elements
The preverbal elements š a, a, d a and ar a cause attraction as the next examples show (cf. IV.8.1.1.3. for analyses of these elements)139.

(109) š a n = te-šš
FUT AD 3PL:DO = 3FS:eat:A
‘She will eat them.’

(110) ne-ttuṭu a y = n-zeḍ g rrḥa
1PL:go:I AD 3MS:DO = 1PL:grind:A in mill
‘We go and grind it in the mill.’

(111) beṣṣiṭa, d a t = t-uf-et g fermaṣya
peseta, CRT AD 3FS:DO = 2S:find:A-2S in pharmacy
‘The peseta, you will find it in the pharmacy.’

(112) mki ma ar a wen = šša-x ši
if NEG FUT AD 2PL:DO = eat:A-1S NEG
‘If I am not going to eat you.’

139 Different from many Berber languages, which have the negative particle ur or a variant thereof the negative particle ma in Ghomara Berber does not cause attraction.
The following examples show the optionality of attraction in this context (again, the example comes from the young speaker). In example (113) the direct object and in (114) the indirect object pronoun follow the verb.

(113) iy uyijd $ a $ ne-$\tilde{g}=$a $ dar $ d\ddaw$
    and billy.goat:EA FUT AD 1PL-leave:A=3MS:DO to light
`And the billy goat, we will leave it until the morning.'

(114) ma a ra ne-$\tilde{g}=as$ hetta smana h-teffey
    NEG AD FUT 1PL-leave:A=3S:IO until from.where 3FS-go.out:I
`We will not even leave for her an exit.'

3.3.4. Combination of the clitics

In this paragraph we discuss the combination of the verbal clitics in preverbal and postverbal position (cf. III.11. on pronouns). The verbal clitics have a fixed order in postverbal position: indirect object clitic - direct object clitic - deictic clitic, for example:

<table>
<thead>
<tr>
<th>Verb</th>
<th>IO</th>
<th>DO</th>
<th>Deictic</th>
</tr>
</thead>
<tbody>
<tr>
<td>i-ml</td>
<td>am</td>
<td>ten</td>
<td>d</td>
</tr>
<tr>
<td>3MS:show:P</td>
<td>2FS:IO</td>
<td>3PL:DO DC</td>
<td></td>
</tr>
</tbody>
</table>
`He showed them to you.'

In the following example the combination of indirect object and direct object clitics in postverbal position is shown:

(115) ta$\ddot{e}$eyyalt = ahen $ te-nn =$as $= t $ i $ yemma $ nn-es
    girl:EL=S:ANP 3FS-say:P = 3S:IO = 3FS:DO to mother of:3S
`The girl told it to her mother.'

When a combination of clitics occur in attraction context, the indirect object pronoun is placed in preverbal position. The direct object pronoun is not fronted and retains its postverbal position. Instead of the direct object being fronted, a petrified element t takes the position between the indirect object pronoun and the verb. Based on its shape and position (following the indirect object pronoun) this element could be interpreted as a petrified third person feminine singular direct object pronoun. However, synchronically, the element does not express (third) person, number or gender. We therefore consider it simply a preverbal indicator of the presence of a postverbal direct object pronoun. All examples below are taken from texts:
(116)  š  a  y = t = i-ml = ahen  
    FUT  AD  1S:IO = PDO = 3MS:show:A = 3PL:DO
    ‘He will show them to me.’

(117)  netta  i-dda  dar  uyiţd = ahen,  š  a  
    he  3MS:go:P  to  billy.goat:EA = S:ANP,  FUT  AD  
    s = t = i-şš = at  
    3S:IO = PDO = 3MS:eat:A = 3FS:DO
    ‘He went to the billy goat, he will eat it (to her detriment).’

(118)  i-ttehtiţ  a  s = t = i-şš = ahen  aţdi  
    3MS:want:I  AD  3S:IO = PDO = 3MS:eat:A = 3PL:DO  jackal:EL
    ‘The jackal wants to eat them.’

(119)  a  ddu-x  a  s = t = şša-x = ten  
    AD  go:A-1S  AD  3S:IO = PDO = eat:A-1S = 3PL:DO
    ‘I will go and eat them’

3.3.5. The deictic clitic d / id ‘hither’

The deictic clitic d / id can occur in postverbal as well as in preverbal position. Furthermore, in attraction context it is optionally doubled in preverbal and postverbal position. The deictic element occurs most often with movement or action verbs, but sometimes accompanies other types of verbs as well. In the former case the movement or action takes place in the direction of the speaker, as in example (120). In the latter case it either signals involvement of the subject in the event, for example with the verb nn ‘say’ example (121) or a coming into existence or development, for example with verbs like xleq ‘to be born, to emerge’ and ymur ‘to grow’ in examples (123) and (124).

(120)  aţdi  i-ffey = d  
    jackal:EL  3MS:go.out:P = DC
    ‘The jackal came out.’

In example (121) d is preverbal because of the attraction caused by š a.

---

140 In our corpus there is one instance of the form d. This is from a recording of the oldest man in the village. In the Colin texts this form is found as well.
(121) š a d = y-enn: ‘allahwakbar’
   FUT AD DC = 3MS-say:A God.is.greatest
   ‘He then says (hither) ‘God is the greatest.’

(123) i-xelleq = d g imuras
   3MS-be.born:I = DC in riverbeds
   ‘It grows (generally) in riverbeds.’

(124) i-ymur = d mezyan
   3MS-grow:P = DC good
   ‘He has grown well.’

The following two verbs are obligatorily accompanied by the deictic clitic d. In the verb ‘to fetch water’ d has become part of the verb stem. In example (125) a d follows the conjugational prefix. It is preceded by a deictic clitic d which is attracted to preverbal position. In example (126) the form without the d in the stem is shown. The deictic clitic d is still obligatory. Example (127) shows the verb us d ~ as d ‘to land, to be family of’ which also has an obligatory d.

(125) amella ma ra n-uf smana a d = n-dağem
   now:EL NEG FUT 1PL-find:A from.where AD DC = 1PL-fetch.water:A
   ‘We will not find from where to fetch water.’

(126) š a d = n-ağem
   FUT AD DC = 1PL-fetch.water:A
   ‘We will fetch water.’

(127) i netta i-ttasa = d g wammas nn-sen ‘ddaf’
   and he 3MS-land:I = DC in middle:EA of 3PL bam
   ‘And he landed in their middle ‘bam’.

The deictic clitic cannot be combined with Arabic-morphology verbs.

Arabic active participles can be followed by the deictic clitic as well. This is only attested when accompanying active participles of movement, for example:

(128) nīhma raže-in = d
   they AP:return-PL = DC
   ‘They are coming back (hither).’
In attraction context, the deictic clitic can, but need not, be doubled. In such cases, the deictic clitic occurs both in preverbal as well as in postverbal position (example (129), (131), (132)). Example (130), which has a single deictic clitic preverbally, is given to contrast with example (129).

(129) amḵ a d=i-da=d kma-s=ahen, inn = as = t
when REL DC = 3MS-go:P = DC brother-3S = S:ANP 3MS-say:P = 3S:IO = 3FS:DO
‘When that brother of his came, he told it to him.’

(130) amḵ a d=i-da kma-s=ahen, inn = as = t
when REL DC = 3MS-go:P brother-3S = S:ANP 3MS-say:P = 3S:IO = 3FS:DO
‘When that brother of his came, he told it to him.’

(131) Š a d=i-ffuy=d g bellil
FUT AD DC = 3MS-go.out:A = DC in night
‘He will come out in the evening.’

(132) saca, ya wi d=i-ttiȝu-n=d a su...
then only PRH:PL DC = RF-come:I:RF = DC AD [3MS]-drink:A
‘Then, anybody who comes to drink….’

3.3.5.1. Postverbal position

The deictic clitic d / id takes the final position in the clitic complex. When combined with a type 2 direct object clitic of the third person (singular and plural), a number of irregularities appear (type 1 postverbal pronouns have other forms when followed by the deictic clitic d / id, cf. III.11.2.1.1. on pronouns). Most of these irregularities can be analyzed as the result of (long distance) assimilation (see II.3.4.). The following assimilations and allomorphical variations occur:

1. The third person masculine singular pronoun assimilates to the following deictic clitic. There is regressive voice assimilation. The deictic clitic has an allomorph id in this context. Compare example (133) without the deictic clitic to example (134) where it is present.
2. The third person feminine singular pronoun (type 2) is \( t \sim \text{tet} \sim \text{teṯ} \) (cf. III.11.2.1. on pronouns). The form with the deictic clitic is always \text{ded} \ (never \text{ted}). Therefore it is impossible to decide whether it is the result of the \( t + \text{d} \) or \( \text{tet} \sim \text{teṯ} + \text{d} \). (135a) presents forms without the deictic clitic and (135b) is an example with \text{ded}.

\[
\begin{align*}
(135a) & \quad \text{ipbb}=\text{ay}=\text{tet} \sim \text{ibb}=\text{ay}=\text{teṯ} \\
& \quad 3MS:\text{take}:P=1S:IO=3FS:DO \sim 3MS:\text{take}:P=1S:IO=3FS:DO \\
& \quad \text{‘He took it (F) from me.’}
\end{align*}
\]

\[
\begin{align*}
(135b) & \quad \text{ipbb}=\text{ay}=\text{ded} \\
& \quad 3MS:\text{take}:P=1S:IO=DC:3FS:DO \\
& \quad \text{‘He brought it (F) to me (in my direction).’}
\end{align*}
\]

3. When combined with the deictic clitic, the third person plural pronoun \text{ten} has two possible forms. In the first place, there is an long distance assimilated variant \text{den}, which is combined with the deictic clitic (i.e. \text{den} = \text{d}). It is possible to leave out the final clitic, leading to a form \text{den} which combines the pronominal and the deictic information. One way to analyse this latter form is assuming that here (and only here) the deictic precedes the pronoun, i.e. \( \text{d} = \text{ten} > \text{den} \). However, as the deictic clitic never precedes the pronoun in other cases and when the allomorph \text{ahen} is used, it is preferable to regard the pronoun as an allomorph of \text{ten} which has fused with the deictic clitic. In (136a) the form \text{ten} is shown. (136b) shows the use of the form \text{den} and (136c) shows the use of the same pronoun followed by the deictic clitic \text{d}. (136d) shows that the allomorph of the third person plural pronoun \text{ahen} does not assimilate to the deictic clitic.

\[
\begin{align*}
(136a) & \quad \text{i-ml}=\text{ay}=\text{ten} \\
& \quad 3MS:\text{show}:P=1S:IO=3PL:DO \\
& \quad \text{‘He showed them to me.’}
\end{align*}
\]

\[
\begin{align*}
(136b) & \quad \text{i-bb}=\text{ay}=\text{den} \\
& \quad 3MS:\text{take}:P=1S:IO=DC:3PL:DO
\end{align*}
\]
‘He showed them to me (in my direction).’

(136c) \(i\text{-}bb = ay\text{-}den = d\)

3MS\text{-}take:P = 1S:IO = DC:3PL:DO = DC

‘He showed them to me (in my direction).’

(136d) \(i\text{-}bb = ah\text{-}en = d\)

3MS\text{-}take:P = 3PL:DO = DC

‘He brought them.’

The forms of the third person pronouns combined with the deictic clitic are summarised in the following table.

<table>
<thead>
<tr>
<th>Pronoun</th>
<th>Pronoun + Deictic Clitic</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>(t)</td>
</tr>
<tr>
<td>F</td>
<td>(t \sim tet \sim te\tet)</td>
</tr>
<tr>
<td>PL</td>
<td>(ten)</td>
</tr>
</tbody>
</table>

The deictic particle always follows the indirect object pronoun in postverbal position:

(137) \(\text{y\text{-}umr} = \text{ak} = d\text{ amaleh}\)

3MS\text{-}send:P = 2S:IO = DC fish:EL

‘He has sent you a letter.’

3.3.5.2. Preverbal position

In attraction context, the deictic clitic follows the other clitics as shown in examples (138) and (139). When all clitics are expressed the preverbal direct object indicator \(t\) assimilates completely to the deictic clitic. In the latter context, the deicic clitic is obligatorily doubled in postverbal position (140), (141).

(138) \(\text{š} \text{ a } n = d = i\text{-}bb\)

FUT AD 3PL:DO = DC = 3MS\text{-}take:A

‘He will bring them.’

(139) \(\text{š} \text{ a } k = d = i\text{-}bb\)

FUT AD 2MS:IO = DC = 3MS\text{-}take:A

‘He will bring (something) for you.’
3.4. Verbal negation

The verbal predicate is negated by a combination of the preverbal element ma and, optionally, a postverbal element which can be ši, or the more specific markers walu ~ walaw ‘nothing’, wedqul ~ wedqul ~ wetqul ‘nothing’ and ħedd ~ ħetta yan / ħetta yat ‘nobody’. The preverbal element does not cause attraction. The final element follows the entire verbal complex. The [ma verbal complex (ši)] negation negates the verbal predicate. Another negative element, maši, can be used for negation of the complete clause. The negative element cemmer- ‘never’ can be combined with ma as well. Examples (142), (143) and (144) show examples of the [ma verb (ši)] negation. The examples show negation of the Imperfective in (142) and (143) and the Perfective in (144). Examples (144) and (145) show negation with some verbal clitics included.

(142) ma h-reqq ši ga-sen leafya
   NEG 3FS-light:I NEG in-3PL fire
   ‘Fire does not ignite in them.’

(143) lla walu, nekki ma txellaf-ax ši
   no nothing I NEG step:I-1S NEG
   ‘No, I will not take a step.’

(144) ma i-šš = ah ši aţeyyal = ahen
   NEG 3MS-eat:P = 3MS:DO NEG boy:EL = S:ANP
   ‘The boy has not eaten him.’

(145) ma i-bb = as = den = d ši
   NEG 3MS-take:P = 3S:IO = 3PL:DO = DC NEG
   ‘He has not brought them for him.’

The following examples show the use of the elements walu ~ walaw, wedqul ‘nothing’, ħedd ‘nobody’ and ħetta yan.
(146) *ama w-in n ssuq, u-hin ma ssn-en walu*

as.for M-PL:DST of market M-PL:ANP NEG know:P-3PL nothing

‘As for the people of the market, they do not know anything.’

(147) *ma twala-x walaw*

NEG see:I-1S nothing

‘I cannot see anything.’

(148) *ma twala-x wedqul*

NEG see:I-1S nothing

‘I cannot see anything.’

(149) *ma ya n-šekšem hedd*

NEG AD 1PL-make.enter:A nobody

‘We are not going take anybody inside.’

(150) *nukna, baba i-nn = anax ma yer-nax ḫetta yan*

we father 3MS-say:P = 1PL:IO NEG at-1PL not.even one:M

‘We, our father told us we do not have anybody.’

In the case of operator verbs, a sequence of two verbs, or a verb and a participle, the negative elements always accompany the first verb, for example:

(151) *keği ma he-ssn-et ši a wt-et*

you NEG 2S-know:P-2S NEG AD [2S]:hit:A-2S

‘You do not know how to hit.’

The negation of constructions with *a*, *ar a* or *š a* followed by an Aorist also uses [ma verbal complex (*ši*)]. The preverbal negative element precedes the other preverbal particles. The negation of *a* + Aorist can either be a prohibitive or the negation of the non-real, while the negation with *ar a* only has non-real interpretation. Conspicuously, in texts, the latter often precedes verbs conjugated in the first person, suggesting it is used to indicate a stronger modal sense than the negation of *a* + Aorist. The element *š a* does not occur in our texts following *ma*, but was accepted in elicitation. Example (152) shows a prohibitive. Example (153) shows the negation of the non-real. Example (154) shows the use of the postverbal element *wedqul* ‘nothing’ following the negation of the non-real (*a* + Aorist). Between the negator *ma* and the non-real marker there is always insertion of *y*. This is not the case of *ma ar a*, where there is coalescence of the two vowels.
(152) a kem ya siwel, ma ya kṣut-et ši
VOC you just speak:IMP NEG AD [2S]-be.afraid:A-2S NEG
‘You (F.) just speak, don’t be afraid.’

(153) ma ya am=šša-x ši
NEG AD 2FS:DO=eat:A-1S NEG
‘I will not eat you.’

(154) ma ya am=ḡḡ-ay wetqul
NEG AD 2FS:DO=do:A-1S nothing
‘I will not do anything to you.’

(155) lla, ma ra ḡḡ-ay wedqul
no NEG AD do:A-1S nothing
‘No, I’m not going to do anything.’

The verb Ill ‘to be’ is negated in the same way as other verbs [ma verb ši], except when it forms a past marker together with aḡ ~ ak (see IV.9.5.). In this case the postverbal marker may, but need not, follow the final verb. In example (156) the negation of the verb on its own is shown. In (157) the position of the postverbal marker is after the first verb while in (158) it appears after the final verb.

(156) ma ye-ll ši mnaḏem, ma yell ši ssbhec
NEG 3MS-be:P NEG man NEG 3MS-be:P NEG lion
‘It is not a man, it is not a lion.’

(157) ma aḡ lla-n ši ka-y-felḥ-u bezzaf
NEG PST be:P-3PL NEG IMP-3PL:IMPF-cultivate-3PL:IMPF a.lot
‘They did not cultivate the land a lot.’

(158) ma aḡ lla-n ka-y-felḥ-u ši
NEG PST be:P-3PL IMP-3PL:IMPF-cultivate-3PL:IMPF NEG
‘They did not work the land.’

If there is a preposition the postverbal negative marker can follow either the verb or the preposition, for example:

(159) axyam a lla ma sken-t ši ga-s
house:EL REL be NEG live-1S:PF NEG in-3S
‘The house I did not live in.’

(160) axytam a lla ma sken-t ga-s ši
         house:EL REL be NEG live-1S:PF in-3S NEG
‘The house I did not live in.’

The postverbal element can be absent in certain contexts (cf. Caubet 1996: 86-88 for Moroccan Arabic and Lafiouk 1996: 56-60 for Tarifiyt Berber). The cases found in our corpus largely correspond to those sketched by the aforementioned authors. Each of the contexts will be enumerated and illustrated below.

After mki ‘if’ and baš ‘so that’.

(161) mki ma i-senkr=anax lefqi, šku š a yen=i-senkur?
         if NEG 3MS-wake.up:P =1PL:DO imam, who FUT AD 1PL:DO =3MS-wake.up:A
‘If the imam does not wake us up, who will wake us up?’

(162) netta zeema-k i-htaž a fsex šškaṛa baš ma ya
         he kind.of-2MS 3MS-want:P AD [3MS]-open:A bag so.that NEG AD
         te-flet tayṭṭ
         3FS-escape:A goat:EL
‘He kind of wanted to open the bag so that the goat does not escape.’

In relative clauses and interrogatives, e.g:

(163) wa lla ma qari haw maši mdewwex
         PRH:MS be NEG learn:AP:MS PR:3MS go:AP:MS confuse:AP:MS
‘The one who is uneducated goes along being confused.’

(164) ak i-l all dhaḍin, ma ssn-ax šk a t=i-leqqt-en
         PST 3MS-be:P here NEG know:P-1S who REL 3MS:DO =RF-pick.up:P-RF
‘He was here, I do not know who picked it up.’

The postverbal element does not appear in a secondary predicate (cf. IV.3.1.2.3. for secondary predicates).

(165) ma htaž a t=te-wweṭ s lehzam
         NEG [3FS]-want:P AD 3FS:DO =3SF-hit:A with belt
‘She does not want to hit her with a belt.’
The postverbal element is also absent when two predicates are contrasted (cf. Lafkioui, 1996:59).

(166)  $i$-sa$gum$  a  $d = te$-$qqul$  ma  he$-qqel = d$

$3MS$-wait:$P$  $AD$  $DC = 3FS$-return:$A$  $NEG$  $3FS$-return:$P = DC$

‘He waited for her to come back, but she did not come back.’

(167)  $že$h$ha$  i$-tte$iš$  netta  i  yemma  $nn$-$es$,  netta  ma  i$-mellek$,$

Jeha  $3MS$-live:$I$  he  and  mother  of$3S$  he  $NEG$  $3MS$-marry:$I$

mother  of$3S$  $NEG$  $3FS$-marry:$I$

‘Jeha lives with his mother, he does not get married, his mother does not get married.’

The postverbal element is sometimes absent when there is a topic (pro)noun preceding the verb. Examples are:

(168)  $lqawm$  $n$  wassa  amella  ma  i$-ssen$  ha$di$k = ahen  u$-hen$

people  of $today$:$EA$  now:$EL$  $NEG$  $3MS$-know:$P$  thing$=$S$:$ANP$  M$=$S$:$ANP$

‘The people of today do not know that kind of thing.’

When there is coordination of two or more subsequent negations the postverbal element does not appear. For example:

(169)  $ma$  ya  re$g$  ma  ya  ha$di$k

$NEG$  $AD$  $[3MS]$-break:$A$  $NEG$  $AD$  thingy

‘It will not break and it will not do anything.’

(170)  $i$-$qqr = as$:  ‘$ma$  tesla$-x = ak$,  $ma$  tesla$-x = ak$.’

$3MS$-say:$I = 3S$:$IO$  $NEG$  hear:$I$-$1S = 2S$:$IO$  $NEG$  hear:$I$-$1S = 2S$:$IO$

He  tells  him:  ‘I  can  not  hear  you,  I  can  not  hear  you.’

In the non-inflected petrified expression  $ma$ae$et$ ($<$  $ma$  ere$ft$) ‘I do not know.’ borrowed from Arabic the postverbal element never appears. Some examples are:

(171)  $i$-$dda$  š$su$ltan  $ma$et  ana  $a$k  i$-$ll,  $i$-$qqel = d$

$3MS$-go:$P$  sultan  don’t$.$know  where  $PST$  $3MS$-be:$P$  $3MS$-return:$P = DC$

‘The sultan went, I do not know where he was, he came back.’
(172) *macet amzę a ḡa-n lehšam=i*hen
   don’t.know how REL do:P-3PL children=PL:ANP
   ‘I do not know how the children did it.’

The element *eemmṛ* ~ *cummeṛ* ‘never’ has special negative syntax, as it can be either followed or preceded by *ma*. It is never accompanied by a post-verbal negator. As example (175) shows, *ma* can be omitted. It takes borrowed pronominal suffixes (cf. III.11.5.).

(173) ššelḥa *ma eemmṛ-a de-nqtee, ššelḥa eemmṛ-a ma d-enqtee*
   Berber NEG never-3FS 3FS:IMPF-stop Berber never-3FS NEG 3FS:IMPF-stop
   ‘Berber will never die, Berber will never die.’

(174) eemmṛ-ek *ma he-šša-t aylal*
   never-2S NEG 2S-eat:P-2S snail:EL
   ‘Have you never eaten snails?’

(175) *ma ya af-et ši beššita eemmṛ-ek t-uf-et=teṭ*
   ‘You will not find the pessita, never will you find it.’

The negator *maši*, which is the normal negator for non-verbal predicates, can also be used to negate verbal clauses. In this case, the negation has scope over the whole clause. Compare the following examples. In (176) using *ma*...*ši* only the verbal predicate is negated whereas in (177) and (178) using *maši* the complete clause is negated.

(176) *ma i-wwet ši kma-s s rrekla*
   NEG 3MS-hit:P NEG brother-3S with kick
   ‘He did not kick his brother (lit. hit his brother with a kick).’

(177) *maši i-wwet kma-s s rrekla*
   NEG 3MS-hit:P brother-3S with kick
   ‘It is not that he kicked his brother (lit. hit his brother with a kick).’

(178) *te-nn=as: ‘u-hen a ḡaḥa maši š a t=i-bb,*
   3FS-say:P=3S:IO M-S:ANP VOC father NEG FUT AD 1S:DO =3MS-take:A
   š a t=i-nuy u-henni.’
   FUT AD 1S:DO =3MS-kill:A M-S:ANP
   She said: ‘That one dad, it is not that he is going to marry me, he is going to kill me.’

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The negator la is used when there are several coordinated arguments of the verb. The verb itself is negated by ma. The element la is not used for prohibitives in Berber.¹⁴¹ It can be translated in English by ‘neither … nor’. Some examples are:

(179) ma aḡ i-ll ka-y-nbaɛ la bṭaṭa
    NEG PST 3MS-be:P IMPP-3MS:IMPF-be.sold NEG potatoes
    la maṭiša la t-ha la t-ha la t-ha
    NEG tomatoes NEG F-S:PRX-S:PRX F-S:PRX NEG F-S:PRX

‘Neither potatoes nor tomatoes nor this or that were sold.’

(180) ma kayen la g uṭar, la g tṭhar, la g teeddist
    NEG EXST NEG in foot:EA NEG in back NEG in belly:EA

‘There is nothing on the leg, nor on the back, nor in the belly.’

---
¹⁴¹ In local Arabic la is used in the prohibitive, for example muṛu šettf = u la tfezzg = u ‘You should dry the Moor, not make him wet.’ (from a set inserted Arabic phrase in a Ghomara Berber story).
4. Coordinative and subordinative conjunctions

Subordination and coordination both involve the linking of two clauses. The clauses can be linked without any overt element or by means of a conjunction. In this chapter, we will discuss subordinating and coordinating conjunctions (adjoined constructions are discussed in IV.5.11.). In subordinated constructions a dependent clause is linked to the main clause by a conjunction, whereas in coordinated constructions two clauses of equal status are linked to each other by means of a conjunction. In order to make a distinction between the two types it is necessary to find language-internal criteria which differentiate them. For Figuig Berber, Kossmann (1997:323-324) proposes two criteria which distinguish subordination from coordination. A subordinative conjunction cannot be followed by a topicalised (pro)noun (French: *anticipation*); rather a topic (pro)noun has to precede the conjunction, while a coordinative conjunction does allow for a topic immediately following it. Another criterion is that one of the two (main) clauses in a coordinative construction always follows the other, whereas the dependent clause can precede or follow the main clause in subordinate constructions. An additional criterion for subordination put forward by Bentolila (1981:314) in his analysis of Aït Seghrouchen Berber (Middle Atlas), is the attraction of verbal clitics – a criterion which Kossmann refutes.\(^{142}\) In Ghomara most subordinators do not cause attraction, therefore this criterion is not used to distinguish them from coordinative conjunctions. The complementisers *illa* and *billa* occur sometimes in our text corpus. They will be treated in the final part. First, the coordinative conjunctions will be presented, after which the subordinative conjunctions will be discussed.

4.1. Coordination

In this section coordinative constructions are classified on the basis of the four types distinguished by Haspelmath (2007: 2).

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<tr>
<td>Causal coordinator</td>
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<td><em>liyanna, elahēqq</em></td>
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<td><em>elaqiḥal, elaxaṭer ‘because’</em></td>
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\(^{142}\) Bentolila's pseudo-subordinators, which do not allow topicalisation of an argument but do not have attraction either are considered subordinators by Kossmann (1997: 325).
4.1. Conjunctive coordinators

The conjunctive coordinators i ~ ɗ and u ‘and’ are allomorphs. The borrowed conjunction u links verbs while non-borrowed i ~ ɗ only coordinates (pro)nouns and prepositional phrases. The coordinator i ~ ɗ is homophonous with the comitative preposition; as it can also precede prepositional phrases it is not considered the same element as the preposition (cf. III.13.2.1. for the use of i ~ ɗ as a preposition). The form ɗ only appears before vowels, never before consonants, where i is used. While i ~ ɗ is more often used by older people, younger speakers tend to generalise the use of i in all contexts.

4.1.1. Nominal / Prepositional coordinator i ~ ɗ

Noun phrases and prepositional phrases coordinated by i or i ~ ɗ immediately follow the coordinator. Example (1) shows coordination of a noun phrase. A following Berber-morphology noun gets the EA.

1. legrana i ukfer melk-en
toad and turtle:EA marry:P-3PL
‘The toad and the turtle married.’

Example (2) shows the use of ɗ before a noun with an initial vowel and i before a noun with an initial consonant.

2. tettan=t ɣa lebhayem i ɗ iy”yal i tyaten
eat:I=3MS:DO only mules and donkeys and goats:EA
‘Only mules and donkeys and goats eat it.’

In the examples (3) and (4) coordination of prepositional phrases is shown.

3. t uf-et=tet g fermasya i g ụssaka
2S-find:A-2S=3FS:DO in pharmacy and in tobacco.shop
‘You will find it in the pharmacy and in the tobacco shop.’

143 The conjunction itself does not cause attraction. However, as it is obligatorily followed by a + Aorist there can be attraction in this context.
They speak Arabic and Berber.’

\(i \sim id\) cannot coordinate predicates, e.g.

\(\*i-dda\quad i(d)\quad i-qqim\)

3MS-go:P and 3MS-sit:P

‘He went and he sat down.’

\(i \sim id\) is used for a topicalised nominal or prepositional element (cf. IV.7.1.1.5. for topicalisation), for example:

\(aceyyal\quad n\quad \text{sultan}\quad i-dda\quad ka-y-ciss\quad fx-es,\quad i\quad netta\)

child:EL of Sultan 3MS-go:P IMPP-3MS:IMPF-guard on-3S and he

\(i-ttaf=at\quad eawed\)

3MS-find:I=3FS:DO again

‘The son of the sultan kept an eye on him, and then he found her again.’

4.1.1.2. Clausal coordinator \(u\)

Clause linking is achieved by means of the clausal coordinator \(u\) (\(w\) adjacent to vowels) ‘and, in addition’ or by means of parataxis (i.e. without any linker between the clauses, cf. IV.5.11.). Example (7) is an example of a coordinative construction of two verbal clauses with \(u\).

\(ssiri\quad \text{ḏ}\quad p\quad n=t\quad g\quad \text{waḵal}\quad u\quad \text{tmerṛḥ-a}\quad \text{en}=t\quad g\quad \text{tafukt}\)

wash:I-3PL=3MS:DO in earth:EA and let.dry:I-3PL=3MS:DO in sun

‘They wash it in the soil and they let it dry in the sun.’

In the next example the coordinated clause is non-verbal. The example shows that a noun does not take the EA after following \(u\).

\(ne-ttawi=d\quad \text{isyaren}\quad \text{dar}\quad \text{ḥemmal}=\text{ahen}\quad u\quad \text{aywel}\quad \text{yer-nex}\)

1S-take:I=DC sticks to bedstead:EA=S:ANP and at-1PL rack:EL

‘We bring sticks to that bedstead, and we have a rack.’

Example (9) shows that multiple verbs can be coordinated consecutively by means of the coordinator \(u\).
(9) \( n\-n\text{ellm} = a\text{hen} \quad u \quad n\-n\text{šekšm} = a\text{hen} \quad u \quad z\text{edq}\-u \quad g \quad \text{wilha} \)
1PL-teach:P=3PL:DO and 1PL-make.enter:P=3PL:DO and end-3PL:PF in Huelva
‘We tought them and got them in and the ended up in Huelva.’

\( u \) is also used for adverbial and adjectival coordination (the use of \( i \sim \text{id} \) is only reluctantly accepted in this context), for example:

(10) \( x\text{ešš} = ay \quad \text{imal\-hen} \quad \text{muqq\-et} \quad u \quad \text{bezzaf} \)
need:P = 1S:IO fish big-PL and many
‘I want big and many fish.’

(11) \( \text{netta} \quad \text{twil} \quad u \quad \text{yli\-t} \)
he tall:MS and fat:MS
‘He is tall and fat.’

The coordinator \( u \) appears in many adverbials and idioms which are borrowed from Arabic, such as \( u \text{k\-d\-a} \ ‘and so forth’ , \( u \text{\\-f\-a\-i} \ ‘that’s all’ , \( u \text{\-f\-l\-e\-q} \ ‘whatever’ , \( x\text{y\-a\-r} \text{ u } x\text{y\-a\-r} \ ‘even better’ , \( \text{b\-i \ x\-i\-r} \text{ u } \text{e\-l\-a \ x\-i\-r} \ ‘very good’ , \( \text{l\-l} \text{ u } \text{n\-n\-a\-r} \ ‘day and night’ . It is used to link numerals as well (cf. III.12. on numerals). An example is:

(12) \( i\-\text{mm\-u\-t} \quad u \quad \text{h\-l\-e\-q} \)
3MS-die:P and what
‘If he died, so what?’

4.1.2. Disjunctive coordination

There are two conjunctions for disjunctive coordination, \( \text{wella} \sim \text{awella} \) and \( \text{aw} \), both meaning ‘or’. They are borrowed from Arabic. Both conjunctions coordinate all types of phrases and clauses. A number of examples with \( \text{wella} \) will be presented first. In the following examples \( \text{wella} \) coordinates a prepositional phrase (14), a verbal predicate (15) with a preceding topic, a noun phrase (16), an adjectival phrase (17), and adverbs (18).

(14) \( i\-\text{zzenz} = at \quad s \quad \text{tkemmi\-st} \quad n \quad \text{h\-eb\-b} \quad \text{wella} \quad s \quad \text{lx\-u\-b\-za} \)
3MS-sell:P = 3FS:DO with handful:EA of wheat or with bread
‘He sold it for a handful of wheat or for one bread.’

(15) \( \text{ss\-e\-l\-a\-k\-en} = \text{ten} \quad i \quad \text{l\-e\-m\-s\-e\-l\-m\-in} \quad \text{wella} \quad i \quad \text{n\-n\-a\-r} \quad \text{ss\-e\-l\-a\-k\-en} = \text{ten} \quad ? \)
marry:1-3PL = 3PL:DO to muslims or to Christians marry:1-3PL = 3PL:DO
‘Do they marry them to muslims or do they marry them to Christians?’
(16) ma ssay-en šī lḥaṣa te-sha wella lḥaṣa mezyana
NEG buy:1-3PL NEG thing 3FS-good:P or thing good
‘They do not buy a strong thing or a good thing…’

(17) ḥtaẓ-et muqqr-et wella meṣṣi-t?
[2S]want:P-2S big-PL or small-PL
‘Do you want a big one or a small one?’

(18) ḥtaẓ-et bezzaf wella šweyya?
[2S]want-2S many or little
‘Do you want a lot or a little bit?’

The conjunction can occur at the end of a sentence to add emphasis to a question.

(19) ka š a m=i-ssker g intirnit wella?
Q FUT AD 3FS:DO=3MS-do:A in internet or?
‘Is he going to put you on the computer?’

wella has the variants aw and awella, which are infrequent in my corpus, e.g.

(20) qalleḵ ḏtbac š a t=i-šš awella aḡdi
think:MS:PF hyena FUT AD 1S:DO=3MS-eat:A or jackal:EL
‘He thought the hyena will eat me or the jackal.’

(21) ayeṛṛaf n ibawen aw ayeṛṛaf n tazart, fhem-ti?
bowl:EL of beans or bowl:EA of figs, understand-2S:PF
‘A bowl of beans or a bowl of figs, you understand?’

4.1.3. Adversative coordination
Adversative coordination is always binary, i.e. it consists of maximally two conjoined clauses (cf. Haspelmath, 2007: 2). Other types of coordination allow for more than two conjoined clauses. There is one adversative conjunction namely walakin ‘but’. Example (23) show the use of a topicalised noun following the conjunction.

(22) lḥaṛama=yaḏ, xebbɛ=ay=tet, walakin ma ya
safeguard=5:PRX hide:IMP=1S:IO=3FS:DO but NEG AD
te-ġği-et ši sennig leafya
2S-do:A-2S NEG above fire
‘This safeguard, hide it for me, but do not put it above the fire.’

(23) i-dda argaz = ahen walakin tamyart nn-es ma he-dda ši
3MS-go:P man = S:ANP but woman:EL of:3MS NEG 3FS-go:P NEG
‘That man went, but his wife did not go.’

4.1.4. Causal coordination liyanna, elâheqq, elaqibal, elaxâter ‘because’
The coordinative conjunction liyanna ‘because’ indicates a causal relation between two phrases. elâheqq, elaqibal, elaxâter are equivalent to liyanna, although they are much less frequently used. The conjunction can be followed by a verb phrase or a noun phrase, for example in (24) an noun phrase immediately follows the conjunction.

(24) tkeff-et fx-es, liyanna takna
lie-3FS:PF on-3S because co-wife:EL
‘She lied to her, because she is a co-wife.’

In example (25) the conjunction is immediately followed by a verb phrase.

(25) liyanna he-tyima tmen eyyam n lehwa fx-ennex i-ḥesel
because 3FS-stay:I eight days of rain on-1PL 3MS-fall:I
‘Because it keeps raining on us for eight days.’

A topicalised noun can precede the verb phrase, but it cannot precede the conjunction.

(26) liyanna feṛmaṣya he-ṭtak-at = as ilaxirihi te-ṛri = d xf-ek
because pharmacy 2S-give:I-2S = 3S:IO etc 3FS-return:P = DC on-2MS
‘Because you give it to the pharmacy, and she gives (money) back.’

In the following example the use of elâheqq is illustrated from a text excerpt.

(27) i-tšebbâr = ahen ṭremdan g uḍrar. elâheqq qbel zeg u-ḥadin
3MS-grab:I = 3PL Ramadan in mountain:EA because before:from M-PRX:S
aḡ lla-n teemmarr-en ?akṭareyya teemmarr-en g uḍrar
PST be:P-3PL live:I-3PL mostly live:I-3PL in mountain:EA
‘They fasted in the mountains. Because in that time, most people lived in the mountains.’
**semmen ~ semm a** ‘so that’
The conjunction is composed of the instrumental preposition *s* combined with pronominal *men* (it functions as an interrogative as well, cf. IV.6.4.). The interpretation is either ‘with which’ or equivalent to *baš* ‘so that’. The relative marker *a* is optional after *semmen*, (which can result in *semmen + a > semm a*). In the following examples the use of the conjunction is shown. Example (28) shows a topicalised noun directly following the conjunction. Example (29) shows the use of an Imperfective after the conjunction. The relative marker causes attraction of verbal clitics.

(28)  
\[
\text{n-sekr=as} \quad \text{ši} \quad \text{ḥaja} \quad \text{n} \quad \text{lemlaḥ semmen tāzemmiṯ}=\text{ahen}
\]
1PL-do:P = 3S:IO some thing of salt so.that fried.wheat:EL=S:ANP
\[
\text{h-till} \quad \text{ḥelwa}
\]
3FS-be:I sweet:FS

‘We put a bit of salt in it, so that the baked wheat becomes sweet.’

(29)  
\[
\text{wt=ay} \quad \text{s} \quad \text{lehzam semm a} \quad \text{teqql-ax} \quad \text{tameṭṭuṯ}
\]
hit:IMP = 1S:DO with belt so.that REL become:I-1S woman:EL

‘Hit me with the belt, so that I will become a woman.’

**laba ~ bašma** ‘so that not’
The elements *laba* and *bašma* are coordinative conjunctions. In example (30) a topic noun follows the conjunction. These elements are always followed by *a + Aorist*.

(30)  
\[
\text{ẓeyyṛr} \quad \text{x} \quad \text{ṣškara}=\text{yahen} \quad \text{laba} \quad \text{tayaṭṭ}=\text{ahen} \quad \text{a} \quad \text{k}=\text{te-fleṭ}
\]
press:IMP on bag=S:ANP so.that.not goat:EL=S:ANP AD 2MS:IO = 3FS-flee

‘Press on that bag so that the goat will not escape.’

The conjunction *bašma* has the same meaning, cf. the following text excerpt:

(31)  
\[
\text{netta} \quad \text{zeema-k} \quad \text{i-ḥtaẓ} \quad \text{a} \quad \text{fsex} \quad \text{ṣškara} \quad \text{bašma}
\]
he kind.of-2MS 3MS-want:P AD [3MS]open:A bag so.that.not
\[
\text{ya} \quad \text{tefleṭ} \quad \text{tayaṭṭ}
\]
AD 3FS-escape:A goat:EL

‘He wanted, so-to-say, unwrap the bag so that the goat would not escape.’

A topicalised noun phrase can precede the verb after *bašma*, for example:

(32)  
\[
\text{asyun} \quad \text{tleway-en}=\text{t} \quad \text{i} \quad \text{ḍḏmay} \quad \text{n} \quad \text{tsa} \quad \text{bašma}
\]
rope:EL wrap:1-3PL = 3MS:DO to head of cow:EA so.that.not
azaḡlu = ahen  a  fleṯ
yoke:EL = S:ANP  AD  [3MS]escape:A

‘They wrap the rope around the head of the cow, so the yoke does not become loose.’

**fḥalli** ‘as if’
The element **fḥalli** consists of the Arabic elements **fḥal** ‘as’ and the relative marker **lli**. It is considered one element here as **lli** does not function as a relative marker here (as it does in Arabic). For example:

(33)  i-ḡḡ = as  tażellaḥt = ahen  n  ỉṣyaren  fḥalli  t-ɛeddel  ɛfurma
3MS-do:P = 3S:IO  djellaba:EL = S:ANP  of  sticks  as.if  3FS-make:P  form

n  urgaz  tamenṭṭuṯ = ahen
of  man:EA  woman:EA = S:ANP

‘He dressed her with that wooden djellaba (a type of gown) as if she had the form of a man, that woman.’

### 4.2. Subordination

Subordination means that there is an asymmetrical relation between the main clause and the subordinate clause, the latter being syntactically dependent on the former. In the introduction to this chapter the criteria that distinguish coordinative structures from subordinative structures were determined. The subordinative conjunctions presented below comply to at least one of the criteria. All subordinative conjunctions except for **mḵi** ‘if’ and **waxxa** ‘even though’ disallow a following topicalised element. In other words, when there is topicalisation, it precedes the subordinator. Furthermore, all subordinative conjunctions allow for the main clause to precede them. This is the reason **mḵi** and **waxxa** are considered subordinators. As mentioned above, attraction of post-verbal clitics to preverbal position is obligatory for some subordinative conjunctions and optional for others. After a subordinative conjunction an Arabic-morphology verb can be preceded by the Arabic relative marker **d** (cf. IV.5. for relative constructions). All conjunctions that causes attraction allow this optional marker as well. In this table the criteria are enumerated for each conjunction.

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<td>+</td>
<td>+</td>
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<tr>
<td>nya ~ yya  ‘when’</td>
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<td>+</td>
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<td>+</td>
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</table>

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144 It is interesting to note that all conjunctions that (optionally) cause attraction are either followed by **a** or end in **a**, which is historically probably the relative marker **a**.

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4.2.1. amḵ a ‘when’

The subordinating conjunction amḵ a ‘when’ indicates a temporal relationship between the main clause and the subordinate clause in that one event necessarily follows the other. The conjunction is a combination of ammek ‘how’ followed by the relative particle a (cf. IV.6.2.5. for its use as an interrogative pronoun). Therefore the clause following it is a relative clause with all its characteristics (attraction, use of the allomorph of a, cf. IV.5.). When the conjunction is followed by a clause that would contain a nominal predicate as a main clause, the verb ll is used (cf. IV.9. on ll). All aspectual forms, including a + Aorist, can be used in the subordinate clause. In example (34) the Perfective is used. The event in the subordinate clause occurs before the event in the main clause. The conjunctions amḵ a and nya ~ yya (see next paragraph) are similar in meaning, although there seems to be a preference to use amḵ a by younger people.

(34) amḵ a bba-n baqiyat-em akfer ye-wt = at
    when REL take:P-3PL each.other-3PL turtle:EL 3MS-hit:P = 3FS:DO
    ‘When they had married each other, the turtle hit her.’

Example (35) shows an example with an Imperfective in the subordinate clause. The event in the subordinate clause is simultaneous with the event in the main clause.

(35) amḵ a t-titu dar tegurt te-qqr = asen
    when REL 3FS-go:I to door:EA 3FS-say:I = 3PL:DO
    ‘Then, when she goes to the door, she says to them…’

A topic noun cannot follow the subordinate conjunction, for example:

145 The conjunction itself does not cause attraction. However, as it is obligatorily followed by a + Aorist there can be attraction in this context.

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Example (37) shows the use of a + Aorist after the conjunction. The allomorph ar is used (cf. IV.5.9. on relative clauses).

(37) amḵ a ar a ddu ḫmeḏ, ṣ a d = uqql-ay nekkin
when REL FUT AD [3MS]go:A Ahmed FUT AD DC = return:A-1S I
‘When Ahmed is going, I will return.’

An example of an Arabic-morphology verb preceded by d is:

(38) iwa amḵ a d weż-d-ṭ leflaḥa i-nn = as: ‘hala’
well when REL AREL be.ready-3FS:PF crops 3MS-say:P = 3S:IO come:IMP
‘Well, when the crops were ready, he said: ‘come’.

4.2.2. nya ~ yya ‘when’
This subordinating conjunction has two variants which are in free variation: nya and yya ‘when’⁴⁴⁶. By far the most frequent variant in our corpus is nya. Like amḵ a ‘when’ this subordinative conjunction specifies a temporal relationship between the main and the subordinate clause. A number of examples are shown below:

(39) nya i-mlek fx-es, qelle-en
when 3MS-marry:P on-3S leave:P-3PL
‘When he married another, they left’

In example (40) the variant yya is used, followed by a verb in the Imperfective.

(40) yya teqql-en a rnu-n dar ya tayilt sawed
when return:I-3PL AD add:A-3PL to one:F mountain again
‘While they were going back, they continued again to a mountain.’

In the following example the conjunction is followed by the allomorph ar of the non-real marker followed by an Aorist.

⁴⁴⁶ The neighbouring variant of Amṭiqan has niga for ‘when’ (El Hannouche 2010: 156). As there is no separate element ni or yy it is considered a single element together with a.
(41)  nya  ar  a  ru  meqbeyy-a
      when  FUT  AD  [3FS]give.birth:A  be.almost-FS
‘When she will almost give birth.’

After nya ~ yya, verbal clitics are put in preverbal position, for example:

(42)  nya  t = i-żer  hamka  mmerr-t-a  i-rry = as = d
      when  3FS:DO = 3MS-see:P  like.that  be.sick:PP-FS  3MS-return:P = 3S:IO = DC
      leḥšam  nn-es
      children  of-3S
‘When he saw her sick like that, he returned her children.’

Topicalised nouns cannot follow this subordinative conjunction.

(43)  *nya  yemma  nn-es  h-tekker  a  ẓẓall,  i-teffeγ  netta
      when  mother  of-3S  3FS-stand.up:I  AD  [3FS]pray:A  3MS-go.out:I  he
‘When his mother gets up to pray at night, he goes out.’

The correct form is:

(44)  yemma  nnes  nya  h-tekker  a  ẓẓall,  i-teffeγ  netta
      mother  of-3S  when  3FS-stand.up:I  AD  [3FS]pray:A  3MS-go.out:I  he
‘When his mother gets up to pray at night, he goes out.’

When an Arabic-morphology verb is used the Arabic relative element d can follow the conjunction.

(45)  i  netaγa  nya  d  eaq-ेγ  is-sen  rewγ-en
      and  she  when  AREL  be.aware-3FS:PF  with-3PL  flee:P-3PL
‘And when she became aware of them the fled.’

4.2.3. Hypothetical mḵi ‘if’
This conjunction is used to indicate a hypothetic outcome in which there is nothing implied as to the outcome of the situation (cf. Longacre, 2007: 380-381). It states that an event may happen if the first event takes place. A topicalised argument can follow this conjunction, for example:
Examples (47) shows the use of the Perfective after **mḵi**. In example (12) an Arabic-morphology verb is used in the Perfect.

(47) **mḵi** t-sseḥsg-et=t   **i-qellec**
if 2S-make.wet:P-2S=3MS:DO 3MS-leave:P
‘If you make him wet, he is gone.’

(48) **mḵi** tferreq-na **nekki** ḍḍac-ax
if split.up-1PL:PF I be.lost:P-1S
‘If we split up, I will be lost.’

The (§) a + Aorist and the Imperfective can also follow **mḵi**, for example:

(49) **mḵi** š a **y=te-ny-em**,  ḡ-awet a **y=berrḥ-ax**
if FUT AD 1S:DO=2PL-kill:A-2PL, let:IMP-PL AD 3MS:DO=call:A-1S
‘If you are going to kill me, let me call him.’

(50) **mḵi** he-ttiṣu-m dar uxyam, **bb=awet** ḫd-un aman
if 2PL-go:1-2PL to house:EA take:IMP=PL with-2PL water:EL
‘If you go home, take water with you.’

Some speakers use this conjunction in combination with preceding **ya** ‘just’.

(51) **ya** **mḵi** dda-x a **šerṛb-ay** a **n-cayen** amḵ a ye-ll
only if go:P-1S AD try:A-1S AD 1PL-see:A how REL 3MS-be:P
zzayn=aḥen
beauty=S:ANP
‘If I go and try to see how this beauty is.’

When a locative or attributive non-verbal predicate is put in a subordinate clause with **mḵi**, forms related to the verb **II** ‘be’ can be used. In the following example the verb does not agree with the following plural noun.
(52) mki li imalḥen inši waer-in, hayhay
   if be fish some good-PL well.well
   ‘If they are good fish, well well.’

In attributive constructions, the non-verbal predicate can also be used without li, for example:

(53) myaṭaṣn n ṣryal, mki ssardin wella ššral wella tayzalt
   two.hundred of rial, if sardine or jack.mackerel or bogue.fish:EL
   ‘Two hundred rial, if it is sardine or jack mackerel or bogue fish.’

An independent pronoun that immediately follows the conjunction yields the meaning ‘if it were for...’ as in the next example:

(54) mki netta ilaxirih i-tett lceṭṭa=yahen i-teṭṭeṣ
   if he etc 3MS-eat:I bite=S:PRX 3MS-sleep:I
   ‘If it were for him, he would eat a bite and sleep.’

4.2.4. Counterfactual ka ‘if’

The counterfactual ka does not cause attraction. It functions as an interrogative as well (cf. IV.6.1.). Counterfactuals have a double implication which can be caught by the paraphrase ‘something did not happen in event A, and because it did not happen, event B did not happen either’ (cf. Longacre 2007: 381). If the first part, the protasis, is a verbal predicate, it follows ka immediately. If it is a non-verbal predicate, the combination aḡ ~ aḵ + li is used following ka. In the apodosis ka is facultative. In the apodosis, if there is a verbal predicate, the borrowed element kun ~ iḵun ‘then’ can be used. If the apodosis is a non-verbal predicate, li is used. The following examples show the use of the verbal predicates in both parts. In example (56) the apodosis has iḵun.

(55) ka i-qqim maši id izref, ka i-lkem amilla
    CF 3MS-stay:P go:AP:MS with road:EA CF 3MS-arrive:P now
    ‘If he had kept going on the road, he would have arrived by now.’

(56) ka i-qqim maši id izref, ka i-ḵun i-lkem amilla
    CF 3MS-stay:P AP:go with road:EA CF then 3MS-arrive:P now
    ‘If he had kept going on the road, he would have arrived by now.’
‘If the man had caught you, he would have sliced you with this knife.’

In the next examples the use of aḡ ~ ak + II, in the apodosis (58) and in the protasis (59) is shown.

(58) ka qqim-ay mtebbeɛ ÿxiŋma inu, ka lla-x mezyan amilla
CF stay:P-1S follow:PP:MS work POSS:1S CF be:1S good:MS now
‘If I had pursued my work, I would have been fine now.’

(59) ka ak te-ll-at argaz ma y-ḵun ši aḵemmiš n isennanen
CF PST 2S-be:P-2S man:EL NEG then NEG bunch:EL of needles
‘If you were a man you would not have been a bunch of needles that is thrown
mseryeb g teẓga
throw:PP:MS in forest:EA
in the forest.’

In example (60) ka is only used in the protasis. In the apodosis there is no further marking.

(60) ma nekki ka dda-x amella refs-ax=t, ſeel-ay=am,
as.for I CF go:x now:EL knead:P-1S=3MS:DO lite.oven:P-1S=2FS:IO
āḡ-ay=am
do:P-1S=2FS:IO
‘As for me, if I had gone, I would have kneaded, lit the oven and done (something)
for you by now.’

4.2.5. qebl a ‘before’

The conjunction qebl a indicates that the event in the subordinate clause follows the event in the main clause. This conjunction consists of the preposition qbel ‘before’ followed by the element a (cf. IV.5.). The subordinate clause can follow the main clause.

(61) qebl a i-dda argaz=ahen, i-dda w-ayet
before REL 3MS-go:P man:EL=S:ANP 3MS-go:P M:S:other
‘Before the man went, the other one went.’

Optional attraction is shown in the following examples:
An example of the Arabic relative marker with an Arabic-morphology verb is:

(64) qəbl a d ṣteeml-u ẓtunubrat aṯ llan before REL AREL use-3PL:PF cars PST be-3PL  ka-y-steeml-u ya lekyader IMPP-3PL:IMPF-use-3PL:IMPF only horses ‘Before they used cars they used only horses.’

4.2.6. ḥetta ‘until’

The conjunction ḥetta ‘until’ can only be followed by a verb (cf. III.3.3.3. for a similar form which functions as a preposition). This conjunction can cause attraction (65), but does not do so necessarily, as shown in example (66).

(65) i-qqim i-kkat ga-s ḥetta t=i-ney 3MS-stay:P 3MS-hit:I in-3S until 3MS:DO=3MS:kill:P ‘He kept on beating him until he killed him.’

(66) eaawed ka-y-tih fx-es ‘puk’, ḥetta ye-ny=aṯ again IMPP-3MS:IMPF-fall on-3S bam until 3MS-kill:P=3MS:DO ‘Then he falls upon him ‘bam’ (hit him), until he killed him.’

An example of the Arabic relative marker with an Arabic-morphology verb is:

(67) ma dda-n=i ḥetta d xwa-w sswasa NEG go:P-3PL=DC to.here until AREL empty:3PL:PF Sousis ‘They did not came until the Sousis left.’

4.2.7. zegya ‘since, from the time’

The subordinative conjunction zegya ‘since, from the time’ causes attraction of verbal clitics. Below are two examples:
4.2.8. waxxa ‘even though’

The coordinative conjunction waxxa can be translated as ‘even though’ or ‘even if’. It allows for a topic noun following it, as shown in example (71). It can, but does not necessarily cause attraction, as examples (72) and (73) show.

(71) waxxa ḥmeq i-dda = d, ma ra sker walu
even.though Ahmed 3MS:go:P = DC NEG FUT [3MS]do:A nothing
‘Even if Ahmed came, he will do nothing.’

(72) waxxa i-ẓr = aṯ aṯḡam, ma i-ṇn = as walu
even.though 3MS:see:P = 3MS:DO yesterday:EL NEG 3MS:say:P = 3S:IO nothing
‘Even though he saw him yesterday, he did not say anything to him.’

(73) waxxa t = i-ẓer aṯḡam, ma inn = as walu
even.though 3MS:DO = 3MS:see:P yesterday:EL NEG 3MS:say:P = 3S:IO nothing
‘Even though he saw him yesterday, he did not say anything to him.’

An example of the Arabic relative marker with an Arabic-morphology verb is:

(74) waxxa d ṣṣad-tum ḳhnr = aḏ ma ḳe-bba-m = d ḳuḍqul
even.though AREL fish day = S:PRX NEG 2PL-take:P = 2PL:DC nothing
‘Even though you fished today, you haven’t caught anything.’

4.2.9. baš ‘so that’

The conjunction baš ‘so that’ is obligatorily followed by a + Aorist or an Arabic Imperfect
in the case of Arabic-morphology verbs. Only the negative marker can come between baš and the verb. The conjunction itself does not cause attraction, though the obligatory non-real marker attracts postverbal clitics to preverbal position. In example (75) the conjunction is followed by a negative particle, the non-real marker and an attracted indirect object clitic. Example (76) shows that a topic is not allowed after the conjunction.

(75) nekki nna-x = ak ššwešk leḥšam nn-ek baš a
I tell:P-1S=2MS:IO make.dissappear:IMP children of-2MS so.that AD
ḡḡ-ay leša
do:A-1S supper
‘I said to him, make your children dissappear so that I can make supper.’

(76) *ššwešk leḥšam nn-ek baš leša a ḡḡ-ay
make.dissappear:IMP children of-2MS so.that supper AD do:A-1S
‘Make your children dissappear so that I can make supper.’

4.2.10. Constructions with ma

The preposition bla, the conjunction qebla and the interrogative ana can be combined with ma to form a conjunction (cf. IV.6.8. for the use of ma with interrogatives). In the case of qebla, ma is optional. The form of the conjunction can be qbel as well before ma. It is not possible to have a topicalised noun following ma. Some examples are:

(77) i-ssen bla ma i-nn = as = t argaz = ahen
3MS-know:P without MA 3MS-say:P = 3S:IO = 3MS:DO man:EL = S:ANP
‘He knows without that man telling him.’

(78) qebla ma ye-quur lebšel, i-nn = as: hala
before REL MA 3MS-dry:P onions 3MS-say:P = 3S:IO come:IMP
‘Before the onions were dry, he said: ‘come’

(79) ana ma ufa-n tala i-qqr = as: ‘a weddi
where MA find:P-3PL source 3MS-say:1 = 3S:IO o boy
nekki kempt-ax’
I be.thirsty:P-1S
‘Wherever they found a source, he said: ‘Well, I am very thirsty.’

4.3. Complementisers illa and billa

In most secondary predicate constructions there is no linker. However, sometimes the particles illa and billa are used to link the argument to the matrix verb. The two particles
are in free variation. Their occurrence is very infrequent in our corpus. In example (80) the use of billa is shown with a non-verbal clause.

(80) \text{\textit{i̲}\text{ɣzizel}=ahen, i-caql=at billa tameṭṭu}=ahen} \\
and \text{ɣzizel=S:ANP 3MS-recognise:P =3FS:DO COMP woman:EL=S:ANP} \\
\text{‘And that ɣzizel, he recognised that she was that woman.’}

(81) \text{\textit{ku nnhar i-ẓẓar=at das, billa i-thaḍik}} \\
every day 3MS-see:I =3FS:DO there COMP 3MS-do.thingy:I \\
\text{‘He sees him here doing thingy.’}

(82) \text{\textit{t-han eaq-et illa yr-es lmešker}} \\
F-S:ANP be.aware-3FS:PF COMP at-3S anaesthetics \\
\text{‘That one was aware that she had anaesthetics.’}

The particle bihen can optionally follow illa, for example:

(83) \text{\textit{š i-穈-u is-sen illa bihen ham das}} \\
FUT 3PL:IMPF-be.aware-3PL:IMPF with-3PL COMP COMP PR:3MS there \\
\text{‘There will be aware that they are there.’}
5. Relative constructions

Relative clauses modify nouns and pronouns. In Ghomara Berber the relative clause always follows the head. Relative clauses based on non-verbal predicates necessarily have a verb or, in the case of the adjective and the participle, a relative form (see III.9. for adjectives). Ghomara Berber does not have a relative pronoun, but it has an obligatory relativiser \( \text{a} \), which relates the relative clause to the head noun without reflecting any properties of the head (cf. Payne 1997:326 for the difference between a relativiser and a relative pronoun). The relativiser causes attraction of verbal clitics and it evokes the appearance of the allomorph \( \text{ar} \) of the non-real particle. The relativiser can occur on its own in free relatives.

Ghomara Berber resorts to different strategies to indicate which argument has been relativised (see Galand, 2002 [1988]: 219-240 for a typology of relative clauses in Berber). Berber-morphology verbs have a relative form when the subject is relativised. Adjectives have a relative form as well (see III.9.1.). For direct object arguments of Berber-morphology verbs a gapping strategy is used, meaning that there is no pronominal or other reference to the head in the relative clause. Other relativised positions, i.e. indirect objects, benefactive/malefactive, genitive and prepositional complements use resumptive pronouns.

The relative form of the verb is used with subject relatives and with benefactive/malefactive relative constructions; otherwise normal forms of the verb are used.

Arabic-morphology verbs behave differently from Berber-morphology verbs. They do not have a special relative form to indicate that the subject or malefactive/benefactive is relativised. The normal form of the verb is used in all relative clause types. Arabic-morphology verbs can be, and often are, accompanied by the Arabic relativiser \( \text{d} \) in all types of relative clauses, which follows the Berber relativiser \( \text{a} \). Non-subject arguments are referred to by a resumptive pronoun in the relative clause, except for direct object relatives where the pronoun on the verb is facultative.


Any aspeptual stem of Berber or Arabic-morphology verbs can appear in the relative clause. The allomorph \( \text{ar} \) of the non-real marker appears before both Arabic and Berber-morphology verbs in the relative clause. As the non-real \( \text{a} \) cannot co-occur with an Arabic-morphology verb, its allomorph \( \text{ar} \) cannot co-occur with the Arabic relativiser \( \text{d} \) in relative clauses. In the following, all relative constructions are presented based on the function of the head noun within the relative clause. Berber-morphology and Arabic-morphology verbs will be treated together. We will treat subject relatives (which includes adjectival relatives and participial relatives), direct object relatives, indirect object relatives, benefactive / malefactive / genitive relatives and prepositional relatives (For relatives of non-verbal clauses the reader is referred to chapter IV.7.2.2. on focalisation of non-verbal constructions.
and chapter IV.9. on the verb **ll** ‘to be’). Adjoined relative clauses will be treated briefly, and after that the negation of relative constructions is presented. Finally, relative clauses which are headed by indefinite pronouns and free relatives are treated (interrogatives that function as free relatives are treated in the chapter on interrogatives).

5.1. Subject relatives

When the head noun is the subject of the relative clause, the Berber-morphology verb has the relative marking **i-**-**en**. Adjectives of Arabic origin have the relative forms **i-**-**in** and adjectives of Berber origin have free variation between **i-**-**en** and **i-**-**i-en** (see III.9.1.). The following example shows a subject relative clause and the relative form of the verb:

(1) lekwaṣet = ihen a y-təewwar-en hamka
tapes = PL:ANP REL RF-turn:I-RF like.this
‘The tapes that go around like this.’

The next example has attraction of the direct object pronoun.

(2) lmuɛellim = ahem a k = ye-wt-en
teacher = S:ANP REL 2MS = RF-hit:P-RF
‘That teacher that hit you.’

The Aorist aspectual form (in relatives always preceded by **ar**) does not have the relative form in the subject relative clause, e.g.

(3) t-serred dar-i irgazen a ar a yṯ = nyʷ-en\(^{147}\)
3FS-send:P to-1S men REL FUT AD 1S:DO = kill:A-3PL
‘She sent men to me who will kill me.’

(4) t-unṛ = as tamyart a ar a xdem
3FS-send:P = 3S:IO wife:EL REL FUT AD [3MS]work:A
‘She sent a woman who will work.’

In (5) an Arabic-morphology adjective is shown. In (6) and (7) both variants of the relative forms on Berber-morphology verbs are illustrated using the same adjective.

\(^{147}\) This is the only example in the corpus that has the first singular direct object **yṯ** instead of **ṯ** in this position (cf. III.11.2.1.).
Active and passive participles can have a relative form when the head noun is the subject. The form of the circumfix is y-....-in. The other option is to use the form lla of the verb llo ‘to be’ and the normal form of the participle, i.e. to use the construction used in relativisation of non-verbal clauses. Examples (8) and (9) show the use of the relative form of an active and a passive participle. Examples (10) and (11) show the other type of relative clause.

(8) tamyart a y-nawy-in a ddu, ma he-dda ši
‘The woman who was planning to go did not go.’

(9) mna’dem a y-mestans-in i tafukt ma ya
person REL RF-be.used:PP-RF with sun NEG AD
hleḵ ši deyya
[3MS]be.sick:A NEG quickly
‘A person who is used to the sun will not get sick quickly.’

(10) g tṭšer = ad ga-s ya useyyal a lla msemmi iłyas
in village=S:PRX in-3S one:M boy:EA REL be call:PP Elias
‘In this village there is one boy who’s name is Elias.’

(11) tamyart a lla nacs-a, baqi ma he-kker ši
woman:EL REL be sleep:AP-FS still NEG 3FS-get.up:P NEG
‘The woman who is asleep, has still not got up.’

Arabic-morphology verbs do not have a special relative form. The verb agrees with the relativised subject (the head (pro)noun) as it would in non-relativised clauses. The relative clause has the obligatory relativiser a and an optional borrowed relativiser d. The Arabic
relativiser d is borrowed together with the non-integrated loan verb.\(^{148}\) In texts the relativiser is always present, but according to my informants the utilisation of d is optional. The element d has a wider distribution than subject relatives only, and also occurs with direct object relatives and with subordinating conjunctions. In the following examples the presence (12) and absence (13) of the Arabic relativiser is shown.

(12) \(\text{argaz}=\text{ahen} \quad \text{a} \quad \text{d} \quad \text{ḥṣel} \quad \text{s} \quad \text{leḥšiš} \quad \text{i-mmūt}\)

\(\text{man:EL=S:PRX} \quad \text{REL} \quad \text{AREL} \quad \text{catch}[:3\text{MS:PF}] \quad \text{with hashish} \quad 3\text{MS-die:P}\)

‘The man who got caught with hemp died.’

(13) \(\text{argaz}=\text{ahen} \quad \text{a} \quad \text{ḥṣel} \quad \text{s} \quad \text{leḥšiš} \quad \text{i-mmūt}\)

\(\text{man:EL=S:PRX} \quad \text{REL} \quad \text{AREL} \quad \text{catch}[:3\text{MS:PF}] \quad \text{with hashish} \quad 3\text{MS-die:P}\)

‘The man who got caught with hemp died.’

The relativiser d also appears after demonstrative pronouns that function as a pronominal head of the relative clause, for example in the next text excerpt:

(14) \(\text{w-a} \quad \text{d} \quad \text{ḥreg} \quad \text{lwext}=\text{ahen} \quad \text{haw} \quad \text{g} \quad \text{mirikan}\)

\(\text{MS-PRH} \quad \text{AREL} \quad \text{migrate.legally} \quad \text{time}=\text{S:PRX} \quad \text{PR:3MS} \quad \text{in America}\)

‘The one who migrated illegally in that time is in America now.

The verb agrees with the head in person, number and gender.

(15) \(\text{sswasa} \quad \text{a} \quad \text{d} \quad \text{xwa-w} \quad \text{ṭṭarix}=\text{ahen} \quad \text{u-hen},\)

\(\text{Sousis} \quad \text{REL} \quad \text{AREL} \quad \text{leave-3PL:PF} \quad \text{period}=\text{S:ANP} \quad \text{M-3ANP}\)

\(\text{ḍebb}-\text{en} \quad \text{x} \quad \text{ḍḍmay} \quad \text{nn-sen}\)

\(\text{manage:3PL} \quad \text{on head of-3PL}\)

‘The Sousis that left in that period took care of themselves.’

Example (16) provides the same phrase from elicitation without the borrowed Arabic relativiser:

(16) \(\text{sswasa} \quad \text{a} \quad \text{xwa-w} \quad \text{g} \quad \text{lwext}=\text{ahen}, \quad \text{ḍebb}-\text{en}\)

\(\text{Sousis} \quad \text{REL} \quad \text{leave-3PL:PF} \quad \text{in period}=\text{S:PRX} \quad \text{manage:3PL}\)

\(\text{x} \quad \text{ḍḍmay} \quad \text{nn-sen}\)

\(\text{on head of-3PL}\)

‘The Sousis that left in that period took care of themselves.’

\(^{148}\) In Jbala Arabic there exist different forms of the relativiser (see Heath, 2002: 494-495, Moscoso, 2003: 168-170, Vicente, 2000: 141-143).
When the Imperfect is used, the relativiser d can be utilised as well, as is shown by the following two examples. It must be noted that d in this position was less easily accepted by the informants than before verbs in the Perfect.

(17) *irgazen a ka-y-sekř-u das,*
men REL IMPPF-3PL:IMPF-get.drunk-3PL:IMPF there
*bba-n = ten da leḥbes*
take:P-3PL = 3PL:DO to prison
‘The men who always drink over there have been taken to prison.’

(18) *irgazen a d ka-y-sekřu das,*
men REL AREL IMPPF-3PL:IMPF-get.drunk-3PL:IMPF there
*bba-n = ten da leḥbes*
take:P-3PL = 3PL:DO to prison
‘The men who always drink over there have been taken to prison.’

In the text corpus there is one instance of a subject relative clause where a Berber verb is used that does not have the relative form (except for when a + Aorist is used). The normal form of the verb is used instead. This form is judged grammatical in elicitation. We therefore consider this a marginal but grammatical possibility.

(19) *ha t-an a d = te-dda = d mzizu-ṯ i-ṭebb = at*
PRES F-S:RL REL DC = 3FS:go:P = DC little:DIM-PL 3MS:raise:P = 3FS:DO
*iṭṭulṭan, i-mlek iḏ-es*
Sultan 3MS:marry:P with-3S
‘There is the one who came as a small girl, the sultan raised her and married her.’

5.2. Direct object relatives

Direct object relatives with a Berber-morphology verb are characterised by gapping. The direct object position in the relative clause is left empty. The following two examples show relative constructions in which the direct object of a Berber-morphology verb is relativised:

(20) *šškařa a y-učer aṛeyyāl = aḍ*
bag REL 3MS:steal:P boy:EL = S:PRX
‘The bag that this boy stole.’
Direct object arguments of Arabic-morphology verbs can be relativised as well. There are two strategies in this case. The first one is the gapping strategy, in which the direct object position is left empty in the relative phrase. The second possibility is the use of a resumptive direct object pronoun. The head is linked to the relative clause by the relativiser a and optionally followed by the borrowed Arabic relativiser d. In the following examples (22) and (23) both direct object relatives with d and without d are shown:

(22) ḯahwen a d ḥleḥ-t azgaznēt mezyan-in
beans REL AREL operate-1S:PF last.year good-PL
‘The beans I sowed last year are good.’

(23) ḯahwen a ḥleḥ-t azgaznēt mezyan-in
beans REL operate-1S:PF last.year good-PL
‘The beans I sowed last year are good.’

The following examples show that the resumptive pronoun is optional.

(24) ḯahwen a d ka-ne-fleḥ kul zam mezyan-in
beans REL AREL operate every.year good-PL
‘The beans that I sow every year are good.’

(25) ḯahwen a d ka-n-felḥ = em kul zam mezyan-in
beans REL AREL operate = 3PL:DO every.year good-PL
‘The beans that I sow (them) every year are good.’

(26) ḧarṛr u a d tkeyyef-t nekki mezyan
cigarette REL AREL smoke-1S:PF I good:MS
‘The cigarette that I smoked was good.’

(27) ḧarṛr u a d tkeyyef = u nekki mezyan
cigarette REL AREL smoke-1S:PF= 3MS:DO I good:MS
‘The cigarette that I smoked was good.’

In relative clauses of transitive active participles the gapping strategy is used and the conjugated form of the verb ʿll ‘to be’ appears. As expected, agreement on the participle is
with the subject, not with the head of the relative clause. Compare the following examples which have the same feminine head noun.

(28) taḥaysart a lla-x wakel hay baqq-a das
peasoup:EL REL be:P-1S eat:AP[:MS] PR:3FS still-FS there
‘The peasoup I have eaten is still there.’

(29) taḥaysart a lla-x wakl-a hay baqq-a das
peasoup:EL REL be:P-1S eat:AP-FS PR:3FS still-FS there
‘The peasoup I (F.) have eaten is still there’

(30) taḥaysart a ne-ll wakl-in hay baqq-a das
peasoup:EL REL 1PL-be:P eat:AP-PL PR:3FS still-FS there
‘The peasoup we have eaten is still there’

5.3. Indirect object relatives

As in the case of the subject and direct object relative, the relativiser a is used to link the head noun to the relative clause for indirect object relatives. There is an obligatory resumptive indirect object pronoun. Examples (31) and (32) show a Berber-morphology verb with pronouns in pre-verbal position which agree with the head noun. Examples (33) and (34) show an Arabic-morphology verb with pronouns in post-verbal position which agree with the head noun.

(31) argaz a s=nna-x lkelma=yahen, i-dda ḥal-u
man:EL REL 3S:IO=say:P-1S word=S:PRX 3MS-go:P way-3MS
‘The man to whom I said something went away.’

(32) irgazen a sen=nna-x lkelma=yahen, dda-n ḥal-em
men REL 3PL:IO=say:P-1S word=S:PRX go:P-3PL way-3PL
‘The men to whom I said something went away.’

(33) argaz=ahen a d tleb-t=l-u imalsen,
man:EL=S:ANP REL AREL ask.for-1S:PF=IO-3MS fish
ma i-bb=ahen=d ši
NEG 3MS-take:P=3PL:DO=DC NEG
‘The man from who I ordered fish did not bring them.’

(34) irgazen=ihen a d tleb-t=l-em imalsen,
men=PL:ANP REL AREL ask.for-1S:PF=IO-3PL fish
5.4. Benefactive / malefactive and genitive relatives

Indirect objects (benefactive/malefactive) which are not an argument of the verb, can be relativised. Ghomara Berber resorts to the same strategy as for the indirect object relatives with the difference that the relative form of the Berber-morphology verbs is used in the relative clause. This is the only construction in which the relative form is used when a non-subject argument is relativised. The relativiser \textit{a} is followed by an obligatory indirect object pronoun which agrees with the head. In example (36) this type of relative construction is shown. Example (35) is given to illustrate the sentence from which it is derived. Example (37) shows plural agreement of the pronoun. The indirect object pronoun is obligatory on Arabic-morphology verbs as shown in example (38).

\begin{itemize}
\item \textbf{(35)} \textit{te-mmuṭ = as raiyyalt = ahen i tmeṭṭut = ahen} \\
\textit{3FS-die:P = 3S:IO girl:EL = S:PRX to woman:EA = S:PRX} \\
\textit{‘That girl died to that woman’s detriment.} \\
\item \textbf{(36)} \textit{tameṭṭut = ahen a s = ye-mmuṭ-en raiyyalt = ahen} \\
\textit{women:EL = S:PRX REL 3S:IO = RF-die:P-RF girl = S:PRX} \\
\textit{he-ttru bezzaf} \\
\textit{3FS-cry:I much} \\
\textit{‘The woman whose girl has died cries a lot.’} \\
\item \textbf{(37)} \textit{timɣaṛan a sen = ye-mmuṭ-en tasa = yahen} \\
\textit{women:EL REL 3PL:IO = RF-die:P-RF cow = S:PRX} \\
\textit{ttru-n bezzaf} \\
\textit{cry:I-3PL much} \\
\textit{‘The women of whom the cow has died, cry a lot.’} \\
\item \textbf{(38)} \textit{ššaraḵa = ahen a d eiss-u = l-a medden = ihen} \\
\textit{company = S:PRX REL AREL guard-3PL:PF = IO-3FS people = PL:ANP} \\
\textit{ma he-qqim ši} \\
\textit{NEG 3FS-stay:P NEG} \\
\textit{‘The factory for which those people guarded, does not exist anymore.’}
\end{itemize}

When the possessor of a genitive construction is the head of the relative construction, it is referred to in the relative clause by means of an indirect object pronoun. This type of
relative construction resembles the benefactive/malefactive relative in that the relative form of the verb is utilised. There is an obligatory resumptive possessive pronoun filling the position in the relative clause from which the head noun has been extracted. An indirect object which agrees with the head can follow the relativiser, but is not obligatory present. The obligatory possessive pronoun already refers to the head noun. The relative constructions in (40) and (41) are derived from the sentence in example (39). The difference between (40) and (41) is the use of the indirect object pronoun. In (42) plural agreement with the head is shown.

(39) \textit{i-ttiṭu kma-s n uɛeyyal=ahen da lxariž}  
3MS-go:I brother-3S of boy:EA=S:ANP to abroad  
‘The boy’s brother lives abroad.’ (lit. ‘goes abroad’)

(40) \textit{aɛeyyal=ahen a i-ttiṭu-n kma-s da lxariž}  
boy=S:ANP REL RF-go:I-RF brother-3S to abroad  
‘That boy whose brother lives abroad.’

(41) \textit{aɛeyyal=ahen a s=i-ttiṭu-n kma-s da lxariž}  
boy=S:ANP REL 3S:IO=RF RFG:go:I-RF brother-3S to abroad  
‘That boy whose brother lives abroad.’

(42) \textit{irgazen=ihen a sen=i-ttiṭu-n kma nn-sen da lxariž}  
men=PL:ANP REL 3PL:IO=RF brother of-3PL to abroad  
‘The men whose brother lives abroad.’

5.5. Prepositional relatives

Complements of prepositions can be relativised as well. The preposition has a resumptive pronoun and remains in its original position. In example (43) and (45) we show the clause from which the relative is derived. In the relative clause (44) and (46) the relativiser \textit{a} links the head to the relative clause, the preposition retains its position and has a resumptive pronoun (cf. III.13. for prepositions).

(43) \textit{sers-ay lberraḍ x ššiniya}  
put:P-1S teapot on tray  
‘I put the teapot on the tray.’

(44) \textit{ššiniya a sers-ax fx-es lberraḍ}  
tray REL put:P-1S on-3S teapot  
‘The tray on which I put the teapot.’
Prepositional complements that accompany Arabic-morphology verbs show the same behaviour. The preposition can only appear in post-verbal position. The following examples show the Imperfect (47) and the Perfect (48).

(47) axyam a ka-ne-sken ga-s
    house:EL REL IMPP-1S:IMPF-live in-3S
    ‘The house in which I live.’

(48) axyam a d sken-t ga-s
    house:EL REL AREL live-1S:PF in-3S
    ‘The house in which I lived.’

When the verb II ‘to be’ is used in the relative clause the preposition can either immediately follow the verb or be in final position (see IV.9. for II ‘to be’). The pronominalised preposition can appear before or after the participle or verb as the next examples show (This behaviour of the prepositions is not restricted only to this kind of phrase).

(50) sake
    live:AP:MS in house:EA=S:ANP
    ‘I live in that house.’

(51) axyam a lla-x ga-s sake
    house:EL REL be:P-1S in-3S live:AS:MS
    ‘The house that I live in.’

(52) axyam a lla-x sake ga-s
    house:EL REL be:P-1S live:AS:MS in-3S
    ‘The house that I live in.’
5.6. Indefinite pronouns functioning as heads

The indefinite pronoun ay can function as the head of the relative clause (cf. III.11.9. for the pronoun). The pronoun is followed by the relativiser a and then by the verb. In example (55) the verb has a relative form showing that the pronoun takes the subject position in the relative clause. In (56) the verb has ‘normal’ inflection as the pronoun corresponds to the direct object position in the relative.

(55) ay a s = i-mas-en, i-dda fhal-u
    INDEF REL 3S:IO = RF·happen:P-RF 3MS:go:P way-3MS
    ‘Whatever happened to him, he left.’

(56) ay a ssn-ax, nn-ay = ak = t
    INDEF REL know:P-1S say:P-1S = 2MS:IO = 3FS:DO
    ‘All that I know, I have told you.’

In the next examples an Arabic-morphology verb is shown preceded by the pronoun. Examples (57) and (58) show that it can occur with and without a direct object pronoun which functions as a resumptive pronoun. Example (59) shows that the Arabic relativiser d can be present in this context.

(57) fk = ay ay a tleb-t
    give:IMP = 1S:IO INDEF REL ask.for-1S:PF
    ‘Give me what I demanded from you.’

(58) ay a tleb-ti-ha mużud-a
    INDEF REL ask.for-2S:PF = 3FS present-FS
    ‘Whatever you demanded, it is here.’

(59) ay a d tleb-ti-ha, mużud-a
    INDEF REL AREL ask.for-2S:PF = 3FS present-FS
    ‘Whatever you demanded, it is here.’
The indefinite pronoun can be used in the following idiomatic expression.

(60) \textit{i-sk}er \quad \textit{ay} \quad \textit{nn-es}
\begin{align*}
3\text{MS-do:P} & \quad \text{INDEF of-3S} \\
\text{‘He got some property of his own.’}
\end{align*}

5.7. Demonstrative pronouns and the relativiser \textit{a}

Demonstrative pronouns can be the head of a relative clause. Note that the singular pronouns end in \textit{a} (\textit{wa}, \textit{ta}). As there is assimilation in this type of context, it is impossible to decide whether the relativiser \textit{a} is present or not on the basis of these forms. However, the absence of \textit{a} after the plural pronoun \textit{wi} suggests that the relativiser is not used in this construction. Example (64) shows an example that causes attraction after the plural pronoun.

(61) \textit{w-a} \quad \textit{y-muqqr-in}
\begin{align*}
M\text{-PRH:S} & \quad \text{RF-big-RF} \\
\text{‘The big one’}
\end{align*}

(62) \textit{w-a} \quad \textit{ye-dda-n} \quad \textit{baqi} \quad \textit{ma} \quad \textit{i-qqel=d} \quad \textit{ši}
\begin{align*}
M\text{-PRH:S} & \quad \text{RF-go:P-RF} \quad \text{still} \quad \text{NEG 3MS-return:P = DC NEG} \\
\text{‘The one who left has still not returned.’}
\end{align*}

(63) \textit{w-i} \quad \textit{y-muqqr-in}
\begin{align*}
M\text{-PRH:PL} & \quad \text{RF-big-RF} \\
\text{‘The big one’}
\end{align*}

(64) \textit{wi} \quad \textit{d=i-tit}tu-n=d \quad \textit{a} \quad \textit{su}
\begin{align*}
M\text{-PRH:PL} & \quad \text{DC=RF-go:I-RF = DC AD [3MS-]drink} \\
\text{‘The ones who comes to drink.’}
\end{align*}

Demonstrative pronouns that function as pronominal heads can also function as a relativiser. Even though no examples appear in the text corpus, they were accepted in elicitation. It is not clear how and if this differs from relative clauses with the relativiser \textit{a}. The examples are:

(65) \textit{ṭṭuem} \quad \textit{w-a} \quad \textit{s=fk-ax,} \quad \textit{haw} \quad \textit{baqi} \quad \textit{yr-es}
\begin{align*}
bait & \quad M\text{-PRH:S} \quad 3\text{S:IO=give:P-1S PR:3MS still at-3S} \\
\text{‘The bait I gave him , he still has it.’}
\end{align*}
(66) *lluby a t-a ye-bb, i-šš = at aṯgām*  
kidney.beans F-PRH:S 3MS-take:P 3MS-eat:P = 3FS:DO yesterday:EL  
‘The kidney beans he took, he ate them yesterday.’

(67) *lebwatel wi i-ffy-en, baqi ma qql-en = d ši*  
boats PRH:PL RF-go.out:P-RF still NEG return:P-3PL = DC NEG  
‘The boats that went out have still not returned.’

5.8. The element ‘a’ as head

The element *a* on its own can be the head of a relative clause. Some examples are:

(68) *yr-i a sskar-ax*  
at-1S REL do:1-1S  
‘I have something to do.’

(69) *yr-i a ss-ax*  
at-1S REL drink:1-1S  
‘I have something to drink.’

The relativiser *a* can be used after the existential *kayen* ‘there is/are’. In a few cases in the text corpus the use of the relativiser instead of the pronominal head may indicate a difference between an unspecific reading when the relativiser *a* is used and a specific reading when a pronominal head is used. In example (69) there is no referent mentioned before in the previous discourse, contrary to example (70) where the speaker addresses the listener in the second person before using *kayen* followed by a pronominal head.

(70) *kayen a y-ttawi-n aqellawes n lḥebb, kayen a y-ttawi-n*  
EXST REL RF-take:I-1RF jug:EL of wheat EXST REL RF-take:I-1RF  
ilaʔaxirihi ayʷleyyel, kayen a y-ttawi-n takint, kayen etc clay.pot:DIM:EL EXST REL RF-take:I-1RF clay.bowel:EL EXST  
a y-ttawi-n šškaṛa  
REL RF-take:I-1RF sack  
‘There are those who take a jug of wheat, there are those who take a small clay pot, there are those who take a clay bowl, there are those who take a sack.’

(71) *waxxa ma ya siwl-et id-es, kayen w-a*  
even.though NEG AD [2S]speak:A-2S with:3S EXST M-PRH:S  
y-tsawal-en id-es  
RF-speak:I-1RF with:3S
‘Even if you will not speak it, there is someone who speaks it.’

5.9. The non-real allomorph ar

In the relative clause the pre-verbal elements maš / š / ya / d are not allowed. Instead, the element ar is obligatory (cf. IV.8.1.1.3.3. for its use in non-relative context). The non-real element a follows ar before a Berber-morphology verb. Before an Arabic-morphology verb the a does not appear (cf. IV.8.2.4. for other preverbal particles). Example (72) shows a Berber-morphology verb, whereas (73) shows an Arabic-morphology verb.

(72) \( i\-šš = as \quad \text{leyḍa} = yahen \quad \text{ar} \quad a \quad \text{bb} \quad iḍ \quad \text{išurkan} \)

\[
\begin{align*}
3\text{MS-eat:P} & = 3\text{S:IO} \\
\text{lunch} & = S:ANP \\
\text{REL} & \\
\text{FUT} & \\
\text{AD} & [3\text{MS}] \text{take:A with farmers}
\end{align*}
\]

‘He ate the lunch which he would take to the farmers.’

For the non-real aspect of Arabic-morphology verbs ar is combined with the bare Imperfect form (without the preverbal marker ka-). It is not possible to have the relative particle d in this context.

(73) \( lbeḥriyya \quad \text{ar} \quad i\-ṣṣaḍ\-u \quad \text{alaṣen}, \quad š \quad a \)

\[
\begin{align*}
\text{fishermen} & \\
\text{REL} & \\
\text{FUT} & \\
\text{3PL:IMPF-fish:3PL:IMPF} & \\
\text{tomorrow} & \\
\text{FUT} & \\
\text{AD} & \\
\text{d = bb-en} & \\
\text{bezzaf} & \\
\text{DC=} & \\
\text{take:A-3PL} & \\
\text{much} & \\
\text{AD} & \\
\text{FUT} & \\
\text{AD} & \\
\end{align*}
\]

‘The fishermen who will fish tomorrow, will bring back a lot.’

5.10. Negation of relative constructions

When a relative construction is negated, the form lla of the verb ll ‘to be’ is used after the relativiser a (see IV.9. on ll). The negator ma precedes the (verbal) predicate or the participle. The verb does not take the relative form and there is no attraction, with the exception of genitive relatives. In example (74) negation of a subject relative is shown. Negation by means of only the negative particles is not possible, as shown in (75).

(74) \( i\-dda \quad \text{lmueellim} = ahen \quad a \quad \text{lla ma} \quad i\-wt = aḵ \quad ši \)

\[
\begin{align*}
3\text{MS-go:P} & \\
\text{teacher} & = S:PRX \\
\text{REL} & \\
\text{be:P} & \\
\text{NEG} & \\
3\text{MS-hit:P} & = 2\text{MS:DO} \quad \text{NEG}
\end{align*}
\]

‘The teacher that did not hit you left.’

(75) \( *i\dda = d \quad \text{lmueellim} = ahen \quad a \quad ma \quad k = i\-wt\-en \quad ši \)

\[
\begin{align*}
3\text{MS-go:P} & = \text{DC} \\
\text{teacher} & = S:PRX \\
\text{REL} & \\
\text{NEG} & \\
2\text{MS:DO} & = \text{RF-hit:P-RF} \quad \text{NEG}
\end{align*}
\]

‘The teacher that did not hit you came.’
‘The teachers that did not hit you left.’

‘The teacher (F.) that did not hit you left.’

Adjectives do not take a relative form in negative relative clauses, for example:

‘The camels that are not blind eat.’

‘They brought only sheep that were not big.’

Arabic-morphology verbs do not have the borrowed relative element d in a negation context, for example (80) and (81):

‘I saw the man who was not caught with hemp.’

‘The one(s) who did not illegally emigrate in that time stayed here.’

In the negation of non-subject relatives any relative positon (direct object, indirect object, benefactive/malefactive, genitive, and prepositional complement) is filled by an obligatory resumptive pronoun. Arabic-morphology verbs have an optional resumptive pronoun. The constructions are to some degree similar to what is found in topicalisation, but in the direct object different from the affimative relative strategy, e.g:

direct object
As in affirmative relative clauses, Arabic-morphology verbs have an optional resumptive
pronoun in direct object position. Compare the following examples:

(83) \textit{ibawen} = \textit{ihen} a lla ma fleh-t = \textit{en} \quad \textit{si} \quad \textit{azzagnet,}
\begin{tabular}{llll}
beans = & PL:ANP & REL & be \\
& & & NEG cultivate-1S:PF = 3PL:DO & NEG \\
\end{tabular}
lam baq-in dha
\begin{tabular}{llll}
PR:3PL & still-PL & here
\end{tabular}
\textquote{The beans that I did not sow last year are still here.}

(84) \textit{ibawen} a lla ma ka-ne-fleh \quad \textit{si} \quad \textit{kul}
\begin{tabular}{llll}
beans = & PL:ANP & REL & be \\
& & & NEG IMPP-1S:IMPF-cultivate = 3PL:DO & NEG \\
\end{tabular}
\begin{tabular}{llll}
\textit{eam} & \textit{tyim-en} & dha
\end{tabular}
\begin{tabular}{llll}
year & stay:1-3PL & here
\end{tabular}
\textquote{The beans I do not sow every year stay here.}

Indirect Object

(85) argaz = \textit{ahen} a lla ma mn-ay = \textit{as} \quad \textit{si} \quad \textit{ikelma} = \textit{yahen}
\begin{tabular}{llll}
man = & S:ANP & REL & be \\
& & & NEG say:P-1S = 3S:IO & NEG \\
\end{tabular}
i-dda fhal-u
\begin{tabular}{llll}
3MS-go:P & way-3MS
\end{tabular}
\textquote{The guy to whom I did not say anything has gone.}

Benefactive/Malefactive

(86) \textit{tamettut} = \textit{ahen} a lla ma he-mm\textit{ut} = \textit{as} \quad \textit{si} \quad \textit{taceyyalt} = \textit{ahen},
\begin{tabular}{llll}
woman:EL = & S:ANP & REL & be \\
& & & NEG 3FS-die:P = 3S:IO & NEG \\
\end{tabular}
hay das
\begin{tabular}{llll}
PR:3FS & there
\end{tabular}
\textquote{The woman whose daughter did not die is still there.}

For the genitive there are two possibilities. The pronoun \textit{as} is optional in (87). Contrary to
expectation there is (optional) attraction of the pronoun to preverbal position when the
lexical subject kma-s is in postverbal position. This is the only negative relative construction where attraction occurs.

(87) ẓṛ-ay aeeyyal=ahen a lla kma-s ma i-ttuṭu = (as)
see:P-1S boy:EL=S:ANP REL be brother-3S NEG 3MS-go:1 =(3S:IO)
ši da lxarıž
NEG to abroad
‘I saw the boy whose brother does not go abroad.’

(88) ẓṛ-ax aeeyyal=ahen a lla ma (s) = i-ttuṭu kma-s
see:P-1S boy:EL=S:ANP REL be NEG (3S:IO) = 3MS-go:1 brother-3S
ši da lxarıž
NEG to abroad
‘I saw the boy whose brother does not go abroad.’

Example (89) shows the negation of a relative which has an indefinite pronoun as its head.

(89) fk=ay ay a lla ma tleb-t = ek ši
give:IMP = 1S:IO INDEF REL be NEG ask.for-1S:PF = 2S:DO NEG
‘Give me what I did not demand from you.’

The following examples show the negation of participles in the relative clause. There can not be a relative form in a negative context. In (90) an active participle is shown while in (91) a passive participle is shown.

(90) berreḥ = d x lehšam a lla ma naas-in ši
call:IMP = DC on children REL be:P NEG sleep:AP-PL NEG
‘Call the children who are not asleep.’

(91) mnaḍem a lla ma mestanes ši i tafukt š a
person REL be NEG used.to:PP:MS NEG with sun FUT AD
hleki deyya
[3MS]be.sick:A quickly
‘A person who is not used to the sun will get sick quickly.’
5.11. Adjoined relative clauses

An adjoined relative clause is a combination of a matrix clause and a paratactic relative without any relative marking. Each of the clauses ‘could stand by themselves as independent sentences with approximately the same meaning’ (Noonan, 2007: 65). The two clauses are linked to each other by an uninterrupted intonation contour. In texts this type of relative prevails with indefinite head nouns, whereas other relative clauses predominantly have definite head nouns. Indefinite head nouns are however not excluded in other relative clauses. The elicited examples (92) and (93) are both accepted. Example (93) is a ‘normal’ relative which makes use of the relative particle a. The examples of adjoined constructions below show the use of a verbal predicate (94), a non-verbal predicate (95) and a participle (96).

(92) š  a  k = ml-ay  ya  urgz  i-ttiṣu = d  daʔimen  da  lqeḥwa
FUT  AD  2S:IO = show:A-1S  one:M  man:EA  3MS-go:1 = DC  always  to  café
‘I will show you a man who always comes to the café’

(93) š  a  k = ml-ay  ya  urgz  a  d = i-ttiṣu-n  daʔimen
FUT  AD  2S:IO = show:A-1S  one:M  man:EA  REL  DC = RF-go:1-RF  always
da  lqeḥwa
‘I will show you a man who always comes to the café’

(94) u  baqi  d  a  k = laqi-x  i  ya  n  xeyyna
and  still  FUT  AD  2MS:IO = make.meet:A-1S  to  one:M  of  guy
i-ttiṣu = d  a  qqim  das
3MS-go:1 = DC  AD  [3MS]sit:A  there
‘I am still going to introduce you to a man who comes and sits there.’

(95) aḡ  i-ll  ya  urgz  ma  yr-es  ši  n  leḥsam
PST  3MS-be:P  one:M  man:EA  NEG  have-3S  NEG  of  children
‘There used to be a man who had no children’

(96) yer-sen  ya  n  lefq  mšaret  yer-sen  g  tmezgiḍa
have-3PL  one:M  of  imam  employed:PP:MS  at-3PL  in  mosque:EA
‘They have an iman who is employed in the mosque.’
6. Interrogatives
This chapter first treats yes-no questions and after this content questions. The part on content questions is divided in two parts; in the first part content interrogatives are discussed, in the second part the prepositional interrogatives are presented. Prepositional interrogatives consist of a preposition and the element men. Both simple and composite prepositions can form the basis of such an interrogative. An important difference is that many ‘proper’ interrogatives can be used as free relative elements whereas prepositional interrogatives cannot. At the end of the chapter the free interrogative pronouns for ‘which’, the element aš ~ š, the element ma and kifaš ~ kif ~ ki are discussed.

6.1. Yes-No Questions
There are two ways of marking yes-no questions. The first type only uses rising question intonation. Its segmental structure is identical to that of a declarative statement. The rising intonation is realised on the predicate, whether it is a verbal or a non-verbal predicate. Example (1) is an example with a non-verbal predicate:

\[(1) \quad \text{ɣr-eḵ leflus?} \quad [↗] \]
\[\text{at-2S money} \]
\[\text{‘Do you have money?’} \]

In the following two examples the rising intonation is on the verbal predicate idda ‘he went’, irrespective of whether it is in first or in final position.

\[(2) \quad \text{idدا ḥasan?} \]
\[\text{3MS-go:P Hasan} \]
\[\text{‘Did Hasan go?’} \]

\[(3) \quad ḥasan id-da? \]
\[\text{Hasan 3MS-go:P} \]
\[\text{‘Did Hasan go?’} \]

The second type of yes-no question uses the particle ka, which precedes the entire clause. Its use is optional. The same particle is used in local Arabic.

\[(4) \quad \text{iwa, ka he-zzenz-at = tet?} \]
\[\text{and Q 2S-sell:P-2S = 3FS:DO} \]
\[\text{‘And, did you sell it?’} \]
Another yes-no question particle, interchangeable with *ka* but less commonly used, is the particle *waš*.

(5)  
\[ wāš \ i-fk = aś = tēt? \]  
Q  3MS:give:P = 3S:IO = 3FS:DO  
‘Did he give it to him?’

There is a minor difference between the question particles, for example when an ‘either…either’ question is used. Compare examples (6) and (7). In (6) *ka* is repeated in the second clause. In (7) *waš* cannot be repeated, but one has to take recourse to the conjunction *wella* ‘or’. This is also possible with *ka*, as shown in example (8).

(6)  
\[ kā \ t-ha \ kā \ t-ha? \]  
Q  F-PRX:S Q  F-PRX:S  
‘This one or that one?’

(7)  
\[ wāš \ t-ha \ wella \ t-ha? \]  
Q  F-PRX:S or  F-PRX:S  
‘This one or that one?’

(8)  
\[ kā \ t-ha \ wella \ t-ha? \]  
Q  F-PRX:S or  F-PRX:S  
‘This one or that one?’

### 6.2. Content questions

There are two uses of interrogatives; the first one is the type where it is followed by a relative clause, the second one is the independent use. In the first type of construction the interrogative is essentially a kind of cleft construction (cf. IV.7.2. for focus constructions). The interrogative is the head and is followed by the relativiser *a* and a relative clause. The verb assumes the relative form when the interrogative is the subject. There is always a verb in this construction; if a non-verbal predicate is used in this type of interrogative, the verb *ll* is used, exactly as with other relative clauses (cf. IV.5. relative clauses, cf. IV.9.2. for *ll* in the relative clause). Verbal clitics are attracted to preverbal position. It is not always possible to ascertain the presence of the relativiser, as some interrogatives end in the vowel *a*. Arabic-morphology verbs can be borrowed with the relativiser *d* (cf. IV.5. on relative clauses). There is no attraction of Arabic verbal clitics, nor does the Arabic verb assume a relative form. An example is:
Almost all interrogatives are borrowed from Arabic, often with different forms in free variation. The interrogative can be preceded by a topicalised element. The topic is referred to by a resumptive pronoun in the question, for example:

(10) imalḥen, šḥal a n=i-sey?
干涉 how.much REL 3PL:DO=3MS-buy:P
‘Fish, how much does he buy them?’

When the interrogative is used independently, it occurs either on its own or, depending on the interrogative, it is followed by a verb phrase, a noun phrase or another type of non-relative construction. Some interrogatives can take the following suffix pronouns: ahu (masculine singular), ahi (feminine singular) and ahem ~ ahum (plural). Some interrogatives can be used as adverbs (cf. III.14.). In the following table the forms of each interrogative is shown.

<table>
<thead>
<tr>
<th>Independent</th>
<th>Before rel. clause</th>
<th>Pronoun</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>šenni ~ šennu ~ šnu</td>
<td>šu ~ ma</td>
<td>šn-+pr.</td>
<td>‘what’</td>
</tr>
<tr>
<td>šku(n) (+ pronoun) ~</td>
<td>škun ~ šk</td>
<td>škun-+pr.</td>
<td>‘who’</td>
</tr>
<tr>
<td>šhal</td>
<td>šhal</td>
<td>-</td>
<td>‘how much/many’</td>
</tr>
<tr>
<td>leyyaš ~ leyya</td>
<td>leyyaš ~ leyya</td>
<td>-</td>
<td>‘why’</td>
</tr>
<tr>
<td>ammek</td>
<td>ammek</td>
<td>-</td>
<td>‘how’</td>
</tr>
<tr>
<td>faywex ~ fax</td>
<td>faywex ~ fax</td>
<td>-</td>
<td>‘when’</td>
</tr>
<tr>
<td>ana</td>
<td>ana</td>
<td>-</td>
<td>‘where’</td>
</tr>
<tr>
<td>smana</td>
<td>smana</td>
<td>-</td>
<td>‘where from’</td>
</tr>
<tr>
<td>layn</td>
<td>layn</td>
<td>-</td>
<td>‘whither’</td>
</tr>
<tr>
<td>kifaš ~ kif ~ ki</td>
<td>kifaš</td>
<td>-</td>
<td>‘how’</td>
</tr>
</tbody>
</table>

6.2.1. šw a - ma / šenni ~ šennu ~ šnu / šn-+pronoun ‘what’

There are a number of interrogative pronouns that signify ‘what’. In the relative clause type the forms are šu and ma. The independent form is šenni ~ šennu ~ šnu. Finally there is
a form šn- which is used when followed by a suffix pronoun. Some examples of verbal interrogative phrases are:

(11) šw a ra a bb-et ɛawed?
    what REL FUT AD [2S-]take:A-2S again
    ‘What are you going to take now?’

(12) šw a ġga-n lehšam =iHen?
    what REL do:P-3PL children =PL:ANP
    ‘What did those children do?’

The difference in behaviour between Berber and Arabic-morphology verbs can be illustrated by the utterance ‘what happened to him?’. Most commonly, šu is used, in combination with the Arabic-morphology verb wqeɛ. The relative clause is connected to the question word by means of the Berber relativiser a and the borrowed Arabic relativiser d:

(13) šw a d wqeɛ =l-u?
    what REL AREL happen:3MS:PF =IO-3MS
    ‘What happened to him?’

An alternative way to say ‘what happened to him?’, attributed to old people’s speech, involves a Berber verb. The verb takes the subject relative form:

(14) šw a s=i-mas-en?
    what REL 3MS:IO =RF-happen:RF
    ‘What happened to him?’

Example (15) shows an interrogative of a non-verbal construction in

(15) šw a lla yer-sen?
    what REL be at-3PL
    ‘What do they have?’

An alternative interrogative pronoun, ma ‘what’, is restricted to a few idioms. In the following attestations from my corpus, ma once takes the subject role (16) and once has the direct object role (17). It is impossible to decide whether the relativiser a is present in these constructions, as it would be assimilated to preceding ma. However, as it has all properties of a relative clause it is assumed to be present.
There are a couple of instances in the text corpus of the independent forms šenni, šennu and šnu. These are all well-known from local and koinè Arabic. These pronouns are used in any instance outside of the relative clause constructions, such as independent use (18) and in a non-verbal sentence as in (19) and (20). As these are not relative clauses, the verb יל is not used.

(18) šenni?
what
‘What?’

(19) šenni lkaar?
what bus
‘What is a bus?’

(20) šnu baqi l-eḵ?
what left to-2MS
‘What is left (for you)?

The following example shows the interrogative followed by a suffix pronoun.

(21) šn = ahum iğiğen = id?
what = PL trees = PL:PRX
‘What are these trees?’

6.2.2. šku(n) (+ pronoun) / šk ‘who’

This interrogative has two forms, šk and šku(n). When followed by a relative clause, the interrogative pronoun is šk or škun, for example:

(22) šk a i-tqerqab-en das?
who REL RF-knock:I-RF there
‘Who is knocking there?’

(23) škun a y-tqerqab-en dha g laṭṭa=yaḍ?
who REL RF-knock:I-RF here in bottle=S:PRX
‘Who is knocking here in this bottle?’

Interrogatives based on non-verbal predicates (including participles), use the verb II ‘to be’, for example:

(24) šk a lla gales gum nn-eḍ?
who REL be sit:AP:MS in.front of-2S
‘Who is sitting in front of you?’

When used independently, only šku(n) is found (25). It can be followed by the personal suffixes ahu (26), ahi (27) and ahem ~ ahum (28). Example (29) shows the use of šku(n) in a verbal sentence which is not a relative clause.

(25) te-nn = as: škun?
3FS-say:P = 3S:IO who
‘She said: Who (is there)?’

(26) eemmi nn-em ašnikef u-haḍinet, te-nn = as: škun = ahu?
uncle of-2FS hedgehog:EL M-PRX:S 3FS-say:P = 3S:IO who = 3MS
‘This is your uncle the hedgehog. She said: Who is that?’

(27) škun = ahi t-ha?
who = 3FS F-PRX:S
‘Who is this (F.)?’

(28) škun = ahum u-hi?
who = PL M-PRX:PL
‘Who are they (these ones)?’

(29) šku š a ddu a daḡum?
who FUT AD [3MS-]go:A AD [3MS-fetch.water:A
‘Who is going to fetch water?’
6.2.3. šḥal ‘how much/many’

The interrogative šḥal occurs both in relative clause constructions and independently. Furthermore it has several adverbial functions (cf. III.14. on adverbs).

(30) šḥal a k = i-xeṣṣ-en?
how.much REL 2MS:IO = RF-need:P-RF
‘How much do you need?’

(31) šḥal a h-t tqima mmerḥ-a?
how.much REL 3FS-stay:I dry:PP-FS
‘How long does it stay drying?’

In independent usage, šḥal is not followed by the relativiser a. The next example shows a non-verbal predicate immediately preceded by šḥal, for example:

(32) šḥal yr-ek n ḥilat?
how many at-2MS of tricks
‘How many tricks do you have?’

šḥal occurs independently in final position as well, e.g.

(33) amella leqnīṣṭa te-ssn-et šḥal?
now:EL basket 2S-know:P-2S how.much
‘As for the basket, do you know how much (it costs)?’

6.2.4. leyyaš ~ leyya ‘why’

The interrogative ‘why’ has two forms, leyyaš and leyya, which are in free variation. The interrogative can be followed by a relative clause introduced by a (34), but this is not obligatory, and its absence entails the absence of other characteristics of the relative clause, such as the preverbal position of the verbal clitics (35). In (36) the alternative with attraction is shown.

(34) leyyaš a h-tru-t a taceyyaḥ?
why REL 2S-cry:I-2S o girl:EL
‘Why are you crying girl?’

(35) leyya h-zzenz-at = teteḥ?
why 2S-sell:P-2S = 3FS:DO
‘Why did you sell it?’
(36) leyya a t = tezzenz-at?
    why REL 3FS:DO = 2S-sell:P-2:S
  ‘Why did you sell it?’

In example (37) the interrogative is used independently.

(37) te-nn = as: u leyya?
    3FS-say:P = 3S:IO and why
  ‘She said: And why?’

6.2.5. ammek / amk ‘how’

In the relative clause construction, the form of the interrogative is amk. The independent form is ammek as shown in example (40).

(38) amk a he-ll-at?
    how REL 2S-be:P-2S
  ‘How are you?’

(39) amk a h-kečm-et?
    how REL 2S-enter:I-2S
  ‘How do you enter?’

(40) ammek?
    how
    how?

6.2.6. faywex ~ fax ‘when’

The two forms are in free variation. Example (41) shows the relative clause construction. It is preceded by a topic noun.

(41) aserreyul, fax a y-tnewwar?
    plant:EL when REL 3MS-bloom:I
  ‘the aserreyul plant, when does it bloom?’

The following examples show the independent usage of the interrogative.

(42) fax Š a tīs-et a ḫenna yula?
    when FUT AD [2S:]sleep:A-2S o lady ogress
‘When are you going to sleep, lady ogress?’

(43)  
\[ \text{faywex} \ \text{leeša?} \]
\[ \text{when} \ \text{dinner} \]
‘When is dinner?’

The next example illustrates the alternative form \textit{faywex}.

(44)  
\[ \text{faywex} \ \text{š} \ a \ d=t-uqql-et? \]
\[ \text{when} \ \text{FUT AD DC=2S-return:A-2S} \]
‘When will you return?’

6.2.7. \textit{ana} ‘where’

The independent form of the interrogative \textit{ana} ends in \textit{a}, which makes it impossible to
decide whether it is followed by the relative marker \textit{a} or not. As it has all the characteristics
of an interrogative with a relative clause (type one) it is assumed the \textit{a} is there. An example
of the interrogative is:

(45)  
\[ \text{ana} \ a \ i-xeddem? \]
\[ \text{where} \ \text{REL 3MS-work:I} \]
‘Where does he work?’

(46)  
\[ \text{ana} \ a \ y=t-seyyeb \ lmareyya \]
\[ \text{where} \ \text{REL 1S:IO=3FS-throw:P tide} \]
‘Where the tide has thrown me.’

The interrogative \textit{ana} can be used as an adverb when pointing out something or someone. It
must be preceded by \textit{ha}. For example:

(47)  
\[ i \ \text{lešam nacs-in} \ \text{ha yana} \]
\[ \text{and children asleep:AP-PL PRES where} \]
‘And the children are sleeping over there.’
6.2.8. smana ‘whence’\textsuperscript{150}

As with ana, it is assumed that the a follows the interrogative as the construction shows all necessary conditions.

(48) \textit{smana (a) d=te-bb-at? \whence REL DC=2S-take:P-2S} ‘From where did you take it?’

6.2.9. layn ‘whither’

The relative marker a is optional after the interrogative layn. There is no attraction when a is absent. Compare the following two examples:

(49) \textit{layen a n=ye-bb? \whither REL 3PL:DO=3MS-take:P} ‘Where did he take them?’

(50) \textit{layen ye-dda? \whither 3MS-go:P} ‘Where has he gone?’

When the non-real (§) a + Aorist is used, only the construction without a relative clause can be used. For example:

(51) \textit{layn § a ne-ddu? \whither FUT AD 1PL-go:A} ‘Where are we going to?’

This interrogative also occurs as an adverb. In the first place it can follow the presentative particle \textit{ha} preceding the pronoun in (52). In the second place it can follow the preposition \textit{ḥetta} in (53).

(52) \textit{eawed ḥṭṭu-n am ssiḥa ha layn} again go:1-3PL like from.here PRES whither ‘Then they go like from here to there.’

\textsuperscript{150}This interrogative can be analysed as instrumental preposition s + \textit{mana}. The final element looks like ana ‘where’ and has similar forms in other Berber variants. As the form \textit{mana} does not exist independently in Ghomara, there is no reason to separate them on the synchronic level.
6.2.10. The use of kifāš ~ kif ~ ki ‘how come’

The borrowed Arabic interrogative kifāš ~ kif ~ ki has the meaning ‘how, how come’. Example (54) and (55) from a text shows the use of kifāš.

(54) i-\text{nn}=\text{as}: \text{ kifāš } t-\text{hađin}?
\quad 3\text{MS}-\text{say:P}=3\text{MS}-\text{IO} \quad \text{how} \quad F-\text{PRX:S}
\quad ‘What is the matter with this one?’

(55) kifāš a ye-dda dar uxyam?
\quad \text{how} \quad \text{REL} \quad 3\text{MS}-\text{go:P} \quad \text{to} \quad \text{house:EA}
\quad ‘How did he go home?’

The form kif can be doubled for emphasis, for example:

(56) tasla \text{ṭ}n-un xeṣṣ a selleм x yemma. kif kif?
\quad \text{bride:EL} \quad \text{of-2PL} \quad \text{have.to} \quad \text{AD} \quad [3\text{FS}-]\text{greet:A} \quad \text{on} \quad \text{mother} \quad \text{what} \quad \text{what}
\quad ‘Your bride has to greet my mother. What?!’

Finally the interrogative can be combined with the prepositional interrogative semmen ‘with what’ to signify ‘by means of what’.

(57) ki semmen a ye-qqel mucellim?
\quad \text{what} \quad \text{with.what} \quad \text{REL} \quad 3\text{MS}-\text{become:P} \quad \text{teacher}
\quad ‘How did he become a teacher?’

6.3. Free relative clauses using interrogatives

Most interrogatives can be used in free relative clauses, except for šenni ~ šenNu ~ šnu and faywex for which the following alternatives are used. In (58) the indefinite pronouns is used. In (59) the g lwext ‘in the time’ is used.

(58) i-\text{sskar} ay a qqr-en medden
\quad 3\text{MS}-\text{do:1} \quad \text{INDEF} \quad \text{REL} \quad \text{say:1-3PL} \quad \text{people}
\quad ‘He does what people tell him.’

(59) kifat layn i-go ye-xu
\quad 3\text{MS}-\text{leave:P} \quad \text{like} \quad \text{from:here} \quad \text{until} \quad \text{whither}
\quad ‘He went like from here to there.’

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(59) lekm-ay g lwext a ye-lnkem netta
   arrive:P-1S in time REL 3MS-arrive:P he
   ‘I arrived when he arrived.’

Some examples of the use of the other pronouns are:

(60) a ču nnžum ana a lekm-en
   VOC look:IMP stars where REL arrive:P-3PL
   ‘Look at where the stars have gone.’

(61) ma yr-es layn i-ttiṭu
   NEG at-3S whither 3MS-go:1
   ‘He does not have anywhere to go.’

(62) kul waḥed smana d=i-ttiṭu
   every one whence DC=3MS-go:1
   ‘Each one from whence he comes.’

(63) i-sskar=as kifaš a s=i-sskar kma-s
   3MS-do:I=3S:IO how REL 3S:IO=3MS-do:I brother-3S
   ‘He does to him how his brother does (to him).’

6.4. Prepositional interrogatives

Prepositional interrogatives consist of the preposition followed by the borrowed Arabic element men or mmen ‘what/who’. Both simple and composite prepositions can be combined with men or mmen. After prepositions that consist of a single consonant as well as zeg ‘from’, mmen is used; in all other cases men is used. When a pronominal suffix is added to the prepositional interrogative, only men is used. All prepositional interrogatives are optionally followed by the relative marker a. If the form mmen is followed by a, the final part n can be clipped, e.g. gemmen a > gemm a ‘in what’. The interrogatives nemmen and yemmen are the only ones that are obligatorily followed by a non-verbal predicate. They can take Arabic suffix pronouns: ahu for masculine singular, ahi for feminine singular and ahem ~ ahum for plural (cf. III.11.5.2.). As composite interrogatives all include the element nemmen, they all can take suffix pronouns. Only fsi ~ sfi nemmen ‘behind whom/what’ cannot take a suffix pronoun. The simple prepositions bla ‘without’, am ‘like’, ḥetta ‘until’, and the composite preposition aḡemmaṭ n cannot be followed by men and can therefore not be used as an interrogative. Prepositional interrogatives cannot be used as free relative elements. All prepositional interrogatives are presented in the tables below. A number of examples showing the different uses conclude this paragraph.
### Simple Prepositions + men

<table>
<thead>
<tr>
<th>Prep. + men</th>
<th>Interrogative</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>i + men</td>
<td>imen</td>
<td>‘to whom, with whom’</td>
</tr>
<tr>
<td>n + men</td>
<td>nemmen</td>
<td>‘whose, of what’</td>
</tr>
<tr>
<td>g + men</td>
<td>gemmen</td>
<td>‘in what, in which, in whom’</td>
</tr>
<tr>
<td>s + men</td>
<td>semmen</td>
<td>‘with what’</td>
</tr>
<tr>
<td>x + men</td>
<td>xemmen</td>
<td>‘for what, for what reason, about whom’</td>
</tr>
<tr>
<td>dayer + men</td>
<td>dayermen</td>
<td>‘to whom’</td>
</tr>
<tr>
<td>dar + men</td>
<td>darmen</td>
<td>‘for what, for whom’</td>
</tr>
<tr>
<td>zeg + men</td>
<td>zgemen</td>
<td>‘for which reason’</td>
</tr>
<tr>
<td>yar + men</td>
<td>yemen</td>
<td>‘where (at whom)’</td>
</tr>
<tr>
<td>zdu + men</td>
<td>zdumen</td>
<td>‘under what/whom’</td>
</tr>
<tr>
<td>sennig + men</td>
<td>sennigmen</td>
<td>‘above what/whom’</td>
</tr>
<tr>
<td>qbel + men</td>
<td>qbelmen</td>
<td>‘before what/whom’</td>
</tr>
</tbody>
</table>

### Composite Prepositions + men

<table>
<thead>
<tr>
<th>Prep. + men</th>
<th>Interrogative Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>gum + n</td>
<td>gum nemmen</td>
</tr>
<tr>
<td></td>
<td>‘in front of, beside of whom/what’</td>
</tr>
<tr>
<td>ammas + n</td>
<td>g wammas nemmen</td>
</tr>
<tr>
<td></td>
<td>‘in the middle of whom/what’</td>
</tr>
<tr>
<td>af + n</td>
<td>g waf nemmen</td>
</tr>
<tr>
<td></td>
<td>‘on top of whom/what’</td>
</tr>
<tr>
<td>nešt + n</td>
<td>(ne)št nemmen</td>
</tr>
<tr>
<td></td>
<td>‘as big as whom/what’</td>
</tr>
<tr>
<td>fsi + n</td>
<td>fsi nemmen</td>
</tr>
<tr>
<td></td>
<td>‘after whom/what’</td>
</tr>
<tr>
<td>ṭṭerf n</td>
<td>ṭṭerf nemmen</td>
</tr>
<tr>
<td></td>
<td>‘beside whom/what’</td>
</tr>
</tbody>
</table>

The following examples (64-67) show simple prepositions followed by suffix pronouns.

(64) ne-mn = ahu?
    of.who = MS
    ‘Whose is it (M.)?’

(65) ne-mn = ahi?
    of.who = FS
    ‘Whose is it (F.)?’
The following text excerpts show the use of the simple and composite prepositional interrogatives. Example (68) has a topic noun preceding the interrogative.

(68) sswasa zge-mmenn a d xwa-w ssiha?
Sousi’s from.what REL AREL leave3PL:PF from.here
‘For which reason have the Sousi’s moved from here?’

(69) u se-mmenn aḵ te-lla-t t-zumm-et kegin?
and with-what PST 2S:be-2S 2S:fast-2S you:M
‘And on the basis of what were you fasting?’

The preposition i functions as a dative and as a comitative which is reflected in the interrogatives as shown in example (70) and (71) (cf. III.13. for prepositions). In (72) and (73) non-verbal interrogatives are shown using nemmen. In example (73) the interrogative has a pronominal suffix.

(70) i-mmenn lnakla = yad?
for-whom food = S:PRX
‘For whom is this food?’

(71) i-mmenn ar a ddu-t?
with-whom FUT AD [2S-]go:A-2S?
‘With whom are you going?’

(72) ne-mmenn kegin aceyyal?
of-who you:M boy:EL
‘Whose child are you?’ (lit. ‘of whom are you a child’)
Example (74) shows the use of an interrogative on the basis of a composite preposition.

(74) gum ne-mmen š a ddu-t?
in.front of-who FUT AD [2S-]go:A-2S
‘In front of whom will you go?’

Some other examples are:

(75) nqes ši ḫaža zeg leflaḥa = yahen se-mmen a
decrease:IMP some thing from crops = S:ANP with-what REL
h-teffy-et ḥal-ek
2S-go.out:I-2S way-2MS
‘Decrease some of those crops so you can go out.’

(76) kull waḥid ge-mmen š a debber
every one in-what FUT AD [3MS-]arrange:A
‘Everyone is going to arrange something.’

6.5. Free interrogative pronouns for ‘which’

There exist a special interrogative pronoun meaning ‘which one(s)’. This pronoun has three forms: a masculine singular, a feminine singular and a plural form. They consist of two parts: a masculine pronominal element w or a feminine element t. Number is expressed by aytum for the singular and itum for the plural. They can be followed by a verbal as well as a non-verbal predicate, as shown in examples (77) and (78).

MS w-aytum ‘which one’
FS t-aytum ‘which one’
PL w-itum ‘which ones’

(77) w-aytum argaz?
M-which.one:S man:EL
‘Which one is the man?’
6.6. aškayqululu ‘whatchamacallit’

In the expression aškayqululu ‘whatchamacallit’ borrowed from Arabic but commonly used in Ghomara Berber when the speaker cannot retrieve the word, aš is used. The Arabic form is a short sentence (‘what is it called’). In Ghomara Berber, the entire expression functions as a single noun, as shown in the following example, where it is followed by a postnominal deictic clitic.

(80) hay he-tteftaf x hadīk x aškayqululu = ahen,
    PR:3FS 3FS:search:I on thing on whatchamacallit = S:ANP
    x udideḡ
    on pounder:EA

   ‘She is looking for the thing, that whatchamacallit, the pounder.’

6.7. šmen ‘thingy’

The interrogative šmen ‘what kind of’ is composed of š + men (š is not a preposition). It cannot be used as an adverbial and it does not take a suffix pronoun. The use of šmen is illustrated in the next text excerpt:

(81) ḫlah ḫlah, nya y = te-dda tamyart šmen ḫbiḥa
    God God, when 1S:IO-3FS:go:P woman:EL what.kind love
    t = ye-qqīm-an i nekkinet
    1S:IO-3IO = RF:stay:P-RF for I

   ‘By God, since my wife left, what love do I have left?’

6.8. The element ma ‘-ever’

All interrogatives, including prepositional interrogatives, except for leyyaš ~ leyya can be followed by the element ma which can be translated to English ‘-ever’ as in ‘whatever’ etc. The interrogative is a free relative element and is only combined with verbal phrases.
(82) \[ xeddm = ahen \ amek \ ma \ \{ \ k = i-nn \ leqel \ nn-ek \] work:IMP = 3PL:DO how ever \ 2S:IO = 3MS-say:P mind of-2MS
‘Make them however you want.’

(83) \[ ana \ ma \ ufa-n \ tala \ i-qqr = as: \ ‘a weddi \ nekki \ kemt-ax.’ \] where ever find:P-3PL source 3MS-say:I = 3S:IO o boy I burn:P-1S
‘Wherever they found a source he said: ‘I am thirsty.’

(84) \[ \text{jæja} \ nn-ek \ layn \ ma \ ye-dda, \ \{ \ s \ a \ d = i-qqul \ argaz \] father of-2MS whither ever 3MS-go:P FUT AD DC = 3MS-return:A man:EL
‘Wherever your father goes, he will return as a real man.’

(85) \[ \{ \ s \ a \ ne-ddu \ gemmen \ ma \ ye-lla-n \] FUT AD 1PL-go:A in.what ever RF-be:P-RF
‘We will go in whatever there is.’

(86) \[ sers = at \ zdu \ men \ ma \ ye-lla-n \] put:IMP = 3FS:DO under what ever RF-be:P-RF
‘Put it under whatever there is.’

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7. Information structure
In this chapter the syntax of pragmatically marked structures will be addressed, essentially the syntactic expression of topicalisation and focalisation. Other markers which correlate to topicalisation or focalisation, such as prosody, will be touched upon only in passing in the discussion on topicalisation and not be considered in the discussion on focalisation (cf. Mettouachi 2003 and Lafkioui, 2011). Topicalisation and focalisation are found in verbal as well as non-verbal sentences. The discussion will start with the topicalisation of verbal constructions after which non-verbal constructions will be treated. After this focalisation of verbal and non-verbal constructions is presented.

7.1. Topicalisation
A topic construction consists of two parts, the topic and the comment. In pragmatic terms, the topic refers to what the sentence is about, the comment is what the sentence says about it (cf. Andrews 2007: 149). Any argument, including oblique arguments, can be marked as the topic of a verbal sentence. A distinction is made between two types of topicalisations in verbal sentences. In the first type the topicalised element is referred to by a resumptive pronoun in the main sentence. In the second type, there is no resumptive pronoun. The topic can be either in initial position or in final position. In the latter case it will be referred to as a post-topic. The topic is can be distinguished from the rest of the sentence by an intonational contour. This is indicated by a comma, an optional intonational break is indicated by a comma between brackets.

7.1.1. Verbal constructions

7.1.1.1. Subject topicalisation
Topicalised subjects are put in sentence-initial position and can be marked by a rising intonation and a break before the predicate. This sets them apart as a topic from the rest of the sentence. The explicit subject topic is resumed by the verbal conjugational affix, which functions as a subject. This means that reference to the subject is obligatory, but as subject marking on the verb is obligatory anyhow this is as expected. In example (1) a noun is topicalised while in example (2) a pronoun is topicalised.

(1)  ayižd = ahen(,)  i-kker  i-xebbeɛ
     billy.goat:EL = S:ANP 3MS-get.up:P 3MS-hide:P
     ‘The billy goat, (he) got up and hid.’
The same type of subject topicalisation is found with sentences with an Arabic-morphology verb, e.g.

(3) \textit{taṣeeyalt = ahen(,) teḥda \textit{ka-t-ṭeaf}}
\text{girl:EL=S:ANP 3FS-begin:P IMPP-3FS:IMPF-become.thin}

‘That girl, she began to lose weight.’

(4) \textit{netta(,) \textit{ka-y-tlaqa yah tmeṣra mağ-a.}}
\text{he IMPP-3MS:IMPF-meet one:F wedding:EA come:AP-FS}

‘He, he encountered a wedding coming his way.’

Topicalised (pro)nouns also occur with participles, for example:

(5) \textit{netta(,) \textit{waqef argaz = ahen g teggurt}}
\text{he stand:AP:MS man:EL=S:ANP in door:EA}

‘He, that man is standing at the door.’

\textbf{7.1.1.2. Direct object}

When the direct object is topicalised it is always referred to by a resumptive direct object pronoun later in the sentence (cf. III.11.2.1. for direct object pronouns). Furthermore, the topic can be marked by an intonational contour, for example:

(6) \textit{aɣyul(,) umr-en = t šsurkan}
\text{donkey:EL send:P-3PL=3MS peasants}

‘The donkey, the peasants have sent it.’

(7) \textit{tayṭṭ \textit{nn-em(,) i-bb = am = tēt aḡdi}}
\text{goat:EL of-2FS 3MS-take:P = 2FS:IO = 3FS:DO jackal}

‘Your goat, the jackal has taken it.’

\textbf{7.1.1.3. Indirect object}

A topicalised indirect object pronoun is referred to by a resumptive indirect object pronoun later in the sentence. As in the other cases of topicalisation, there is an intonational contour, for example.
(8) leğmel = ahen(,) i-sell = as aceyyal = ahen n şsultan
camel = S:ANP 3MS-hear:P = 3S:IO boy:EL = SANP of sultan
‘As for the camel, the child of the sultan heard him.’

7.1.1.4. Prepositional phrases
Complements of prepositional phrases can be placed in topicalised position as well. They are placed in initial position and subsequently referred to by a resumptive preposition with a pronominal suffix, as example (9) and (10) show. Furthermore, it is possible to extract the whole prepositional phrase, for example in (11).

(9) lmaḥal n uxyam(,) ne-teemmar ga-s leflaḥa
    room of house:EA 1S-fill:I in-3S crops
‘A room in the house, we fill it with crops.’ (lit. ‘we fill in it crops’)

(10) ssuq nn-ax nuğun(,) aḡ i-ll ka-y-thœr ga-s
    market of-1PL we PST 3MS-be:P IMPP-3MS:IMPF-be.sold in-3S
    bufettiḥa = yahen
    thing.with.hole = S:ANP
‘As for our market, the thing with a hole in it was sold in it.’

(11) g tesraft = ahen(,) ne-teemmar ga-s leflaḥa
    in storage.cellar:EA = S:ANP 1PL-fill:I in-3S crops
‘In the storage cellar, we put the crops in it.’

7.1.1.5. Topicalisation using i
Topicalised elements can be preceded by the nominal / prepositional coordinator i ~ id ‘and’ (cf. IV.4.1.1.1.). Nouns get the EA after this preposition. The function of the topic thus introduced can be interpreted in different ways, but it always implies a continuation from the previous event. Examples (12) and (13) show two examples which have topicalised pronouns preceded by i. The second sentence begins with the preposition i before a topicalised noun. This type of topic, when the topic switches, can be interpreted as contrastive, e.g.

(12) kunna(,) t-yelli-m ya tayilt. i nettaha(,) t-yellay
    arbea n tayilan
    four of mountains
‘You, you climb one hill. As for her, she climbs four hills.’
‘The hedgehog stayed to skin, he stayed to skin, to salt and prepare, while the jackal went to draw water.’

In the following example, there are two topics in two clauses. The first topic is referred back to by a third person singular feminine direct object pronoun. The second one is a topic introduced by i, whose position is filled by a preposition with a pronominal suffix. This topic can be interpreted as a contrastive topic in this case.

‘He sows one garden with wheat, and the other with two or three furrows of beans.’

7.1.1.6. Adverbial phrases

Adverbs can be topicalised, but are not resumed by a pronoun later in the sentence. In the example below, the topicalised adverb is preceded by i to mark continuation from a previous event.

And one day she came back with the sultan.’

7.1.2. Post-topic

In the previous section we have seen that the topicalised element is placed in initial position. Non-adverbial phrases have obligatory pronominal reference in the core part of the sentence. In another type of topicalisation, the post-topic, the topic follows the core of the sentence. All the argument types discussed above can occur in post-topic position as well. The split between the core proposition and the post-topic is marked by an intonational contour, even in cases where the subject is in post-topic position. For core arguments and complements of prepositional phrases there is an obligatory resumptive pronoun expressed on the verb. In the following examples each argument type is presented:
Subject

(16) *ggz-en fḥal-em a ḫmun, amušš i uḥerrey*

go.down-3PL way-3PL AD [3MS-]heat.up:A cat:EL and sheep:EL

‘They descended to warm up, the cat and the sheep.’

(17) *qqima-n mašy-in g lešra, amušš i wḥerrey*

stay:P-3PL go:AP-PL in friendship cat:EL and sheep:EA

‘They continued in friendship, the cat and the sheep.’

Direct Object

(18) *netta i-kkerz = at, ağer = ahen*

he 3MS-plough:I = 3MS:DO field:EL = S:ANP

‘He ploughs it, the field.’

Indirect Object

(19) *fk-an = as = tet, argaz = ahen*

give:P-3PL = 3MS:IO = 3FS:DO man:EL = S:ANP

‘They gave it to him, that man.’

Prepositional Phrase

There are two possibilities, in the first, the post-topic has the preposition, in the other it has not.

(20) *ne-tcemmar ga-s leflaḥa, g lmaḥal n uxyam*

1S-fill:I in-3S crops, in room of house:EA

‘We fill it with crops, the room in the house.’

(21) *ne-tcemmar ga-s leflaḥa, axyam = ahen*

1S-fill:I in-3S crops house:EL = S:ANP

‘We fill it with crops, that house.’ (lit. ‘we fill in it crops, that house’)
Adverbial phrase

(22) tsawalen s learbiyya, ẓẓnanniš
    speak:I-3PL with Arabic Jnan.Nnich
    ‘They speak Arabic, as for Jnan Nnich.’

7.1.3. Non-verbal constructions

In most non-verbal constructions, the normal (non-marked) order is subject - predicate. Topicalisation of the subject involves the reversal of this order, i.e. putting the subject in post-topic position. Different from post-topics in verbal sentences, there is no special intonation involved here. In the following examples topicalisations in non-verbal constructions will be shown (cf. chapter IV.2. on non-verbal predicates).

The Nominal Predicate

(23) mueellim nekkîn
    teacher I
    ‘I am a teacher.’

The Adjectival Predicate

(24) twil-a nettaţa
    tall-FS she
    ‘Tall is she.’

The Prepositional Predicate

(25) g umaras axyam
    in riverbed:EA house:EL
    ‘The house is in the riverbed.’

(26) n ɛaziz axyam = ahen
    of Aziz house = S:ANP
    ‘That house is Aziz’s’

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151 As this is a locative the present relevance pronoun is often used, e.g. haw g umaras axyam ‘The house is in the valley.’ (cf. IV.2.6. for present relevance pronouns).
(27) \textit{inu ayyul = ahen}  
\text{my donkey:EL = S:ANP}  
‘It is mine, that donkey.’

(28) \textit{id-i netta}  
\text{with-1S he}  
‘He is with me.’

(29) \textit{x u\text{"{g}d}i \textit{id u\text{"{s}nikef, tawxraft = ad}}  
\text{on jackal:EA and hedgehog:EL story:EL = S:PRX}  
‘It is about the jackal and the hedgehog, this story.’

(30) \textit{ne\text{"{s}t n webbiz netta}  
\text{as.big.as of bull:EA he}  
‘He is a big as a bull.’

\textbf{The Adverbial Predicate}

(31) \textit{ssiha nu\text{"{k}na}  
\text{from.here we}  
‘We are from here.’

In example (32) which is a locative the present relevance marker \textit{ham} is obligatory.

(32) \textit{i\text{"{k}enniwen ham das}  
\text{twins PR:3PL there}  
‘The twins are there.’

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7.2. Focalisation: cleft constructions

A focus construction consists of two parts: the focus and the presupposition. The focus is ‘the missing information, which the speaker presumes that the hearer wants to know’ while the presupposition ‘presents incomplete information about a situation of which the speaker presumes the hearer to be aware’ (Andrews, 2007: 150). In Ghomara Berber focalisation is accomplished by means of cleft constructions. A definition of a cleft construction is a ‘type of predicate nominal consisting of a noun phrase (NP,) and a relative clause whose relativised NP is coreferential with NP’ (Payne, 1997:278). A cleft construction therefore is a non-verbal construction (the focus) followed by a relative clause (the presupposition) linked to the former by means of the relative particle a (cf. IV.5. for relative clauses). The non-verbal part can be of any kind ranging from (pro)nouns to prepositional phrases and adverbs (for non-verbal predicates cf. IV.2.). The focussed elements are negated in the same way as other non-verbal predicates (cf. IV.2.8.). This section is divided in two parts. In the first section focalisation in verbal sentences is presented. In the second part focalisation in non-verbal sentences is discussed.

7.2.1. Focalisation in verbal sentences

The focalisation of the different syntactic positions will be shown on the basis of the following ditransitive phrase. Note that the indirect object pronoun as is optional and not present in this sentence.

(32) y-umer ḥmeļ leflus i urgaz=ahen aṭḡam
    3MS-send:P Ahmed money to man:EA=S:ANP yesterday:EL
    ‘Ahmed sent the money to that man yesterday.’

Subject focus

(33) ḥmeļ a y-umr-en leflus i urgaz=ahen aṭḡam
    Ahmed REL RF-send:P-RF money to man:EA=S:ANP yesterday:EL
    ‘It is Ahmed who sent the money to that man yesterday.’

Direct object focus

(34) leflus a y-umer ḥmeļ i urgaz=ahen aṭḡam
    money REL 3MS-send:P Ahmed to man:EA=S:ANP yesterday:EL
    ‘It is money that Ahmed sent to that man yesterday.’
Indirect object focus

Like in the non-focalised sentence, the use of the indirect object pronoun is optional as shown in the following examples.

(35) \[ i \ urgaz=ahen \ a \ y-umer \ hmed \ leflus \]
\[ \text{to man:EA=S:ANP REL 3MS-send:P Ahmed money} \]
‘It is to that man that Ahmed sent money yesterday.’

(36) \[ i \ urgaz=ahen \ a \ s=y-umer \ hmed \ leflus \]
\[ \text{to man:EA=S:ANP REL 3S:IO=3MS-send:P Ahmed money} \]
‘It is to that man that Ahmed sent money yesterday.’

Adverbial focus

(37) \[ a\ṭḡam \ a \ y-umer \ hmed \ leflus \ i \ urgaz=ahen \]
\[ \text{yesterday:EL REL 3MS-send:P Ahmed money to man:EA=S:ANP} \]
‘It is yesterday that Ahmed sent money to that man.’

7.2.2. Focalisation in non-verbal sentences

In focus constructions of non-verbal sentences a verbal form is used after the relative linker a. The subject and the predicate of the non-verbal construction can be the focus. The verb \( \text{ll} \) ‘to be’ is used for subject and predicate focus of all types of non-verbal predicates. However, for subject focus of attributive constructions (nominal and adjectival predicates) the relative form \( \text{i-ğa-n} \) can be used as well. The verb \( \text{g} \) ‘to be’ is not used outside of focus constructions in Ghomara Berber, but it is a well-known ‘be’-verb in other Berber languages (cf. e.g. Tašelḥiyt \( \text{g} \) ‘to be’, Aspinion, 1953: 128, cf. chapter IV.9. for \( \text{ll} \) ‘to be’). Below we will discuss subject focus construction first after which predicate focus constructions will be discussed.

7.2.2.1. Cleft sentences with \( \text{i-ğa-n} \): subject focus of nouns and adjectives

The element \( \text{i-ğa-n} \) only occurs when the original non-verbal sentence has a nominal or adjectival predicate. The element that is focalised is the subject of the non-verbal sentence. The verb \( \text{i-ğa-n} \) is obligatorily accompanied by a direct object pronoun, referring to the predicate. Only third person singular and plural direct object pronouns are used which agree in number and gender with the predicate. The predicate can be expressed by a noun phrase following the verb, which is essentially a post-topic construction:

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(38) keği a  t=i-ğa-n mul axyam
   you  REL 3MS:DO=RF-do:P-RF  owner  house:EL
   ‘It is you who is the owner of the house.’

(39) nekki a  t=i-ğa-n argaz
     1  REL 3MS:DO=RF-do:P-RF  man:EL
   ‘It is me who is a (real) man.’

(40) kunna a  n=i-ğa-n irgazen
     you:PL  REL 3PL:DO=RF-do:P-RF  men
   ‘You are (real) men.’

The direct object pronoun can be the only marker of the predicate, cf. example (41).

(41) t-had  a  t=i-ğa-n
     F-PRX:S  REL 3FS:DO=RF-do:P-RF
   ‘This is what it is.’

The next example shows the use of a topic and negation of the focalised nominal predicate:

(42) lmeyreb  mayši u-hen a  t=i-ğa-n
     sunset.prayer  NEG  M-S:ANP  REL 3MS:DO=RF-be:P-RF
   ‘The sunset prayer, it’s not that (that it is).’

Examples of adjectives in this type of construction are:

(43) kunna a  n=i-ğa-n twil-in
     you:PL  REL 3PL:DO=RC-be:P-RC  tall-PL
   ‘You are the ones who are tall.’

(44) nettaṭa a  t=i-ğa-n twil-a
     you:PL  REL 3FS:DO= RC-be:P-RC  tall-FS
   ‘She is the one who is tall.’

7.2.2.2. Cleft sentences with Il ‘to be’

In all clefts based on non-verbal sentences with predicate focus the verb Il is used. In the case of subject focus, the full relative form yellan, used mainly by older speakers, or a more generally used reduced form Illa is used (cf. IV.9. for Il ‘to be’). Different from the construction with i-ğa-n, there is no obligatory direct object pronoun. Examples of both
subject and predicate focus are presented below. The subject is a post-topic which is not necessarily expressed, e.g.

**Nominal predicates**

(45) \( argaz = ahen \ a \ ye-lla-n \ rrifi \)
\( \text{man} = \text{S:ANP} \ \text{REL} \ \text{RC-be:P-RC} \ \text{Riffian} \)
‘It is that man who is a Riffian.’

(46) \( rrifi \ a \ ye-ll, \ (argaz = ahen) \)
\( \text{Riffian} \ \text{REL} \ \text{3MS-be:P} \ \text{man:EL = S:ANP} \)
‘He is a Riffian, (that man.)’

**Adjectival predicates**

(47) \( argaz = ahen \ a \ ye-lla-n \ twil \)
\( \text{man:EL = S:ANP} \ \text{REL} \ \text{RF_be:P-RF} \ \text{tall:MS} \)
‘It is that man who is tall.’

(48) \( twil-in \ a \ lla-n, \ (irgazen = ihen) \)
\( \text{tall-PL} \ \text{REL} \ \text{be:P-PL} \ \text{(men = PL:ANP)} \)
‘He is tall, that man.’

**Prepositional predicates**

(49) \( axyam = ahen \ a \ lla \ g \ umaras \)
\( \text{house:EL = S:ANP} \ \text{REL} \ \text{be:P} \ \text{in} \ \text{riverbed:EA} \)
‘It is that house which is in the riverbed.’

(50) \( ya \ weeyyal \ a \ lla \ yr-es \)
\( \text{one:M} \ \text{boy:EA} \ \text{REL} \ \text{be:P} \ \text{at-3S} \)
‘It is one child which he has.’

(51) \( t-ha \ ay-had \ a \ lla \ ga-s \)
\( \text{F-PRX:S} \ \text{INDEF-PRX} \ \text{REL} \ \text{be:P} \ \text{in-3S} \)
‘This is all there is.’ (lit. ‘this one is that what is in it’)

(52) \( axyam = ahen \ a \ ye-lla-n \ n \ eaziz \)
\( \text{house:EL-S:ANP} \ \text{REL} \ \text{RF-be-RF} \ \text{of} \ \text{Aziz} \)
‘That is the house which is Aziz’s.’

(53) netta a ye-lla-n id-i
    he REL RF-be:P-RF with-1S
    ‘It is he who is with me.’

(54) id-i a ye-ll, (netta)
    with-1S REL 3MS-be:P (he)
    ‘He is with me.’

(55) am netta a ye-ll ḥmeṭ
    like he REL 3MS-be:P Ahmed
    ‘Ahmed is like him.’

(56) x uḡdi id ušnikef a he-ll tawxraft = ad
    on jackal:EL and hedgehog:EA REL 3FS-be:P story:EL=S:PRX
    ‘This story is about the jackal and the hedgehog.’

The Adverbial Predicate

(57) yan yaḡer a lla das
    one:M field:EA REL be:P there
    ‘It is one field which is there.’

The Passive Participle

The following example shows a passive participle in the relative clause (cf. IV.10.1.).

(58) taṣeyyalt a ye-lla-n meḥrub-a he-ttru
    girl:EL REL RF-be:P-RF hit:PP-FS 3FS-cry:I
    ‘It is the girl who was hit who is crying.’
8. Mood and aspect
In this chapter Berber-morphology and Arabic-morphology verbs are described separately. Mood and aspect of Berber-morphology verbs will be treated first. Berber-morphology verbs have three aspectual stems, the Perfective, the Imperfective and the Aorist, which can be distinguished on the basis of their morphology (though not all stems can cf. IV.7.1. morphology). The uses of these stems will be described in four consecutive sections: the bare Aorist, the Aorist in combination with modal particles, the Perfective and the Imperfective. In the section on the Imperfective a part is dedicated to the sequential Imperfective. Arabic-morphology verbs distinguish two forms: the Perfect and the Imperfect. The Imperfect can be preceded by a prefix ka- and other preverbs. It can occur on its own as well. Finally, the Arabic active and passive participles will be presented. Arabic active participles are used for the progressive aspect of a group of semantically defined verbs. Other active and passive participles function as stative predicates. The Berber Aorist, the Berber Imperfective and the Arabic Imperfect have sequential functions. These uses are facultative and are connected to style of speech. They are often encountered in story telling.

8.1. Berber-morphology verbs

8.1.1. The bare Aorist
In Berber studies, the bare Aorist (i.e. the Aorist without the non-real marker a), is described as a neutral aspectual form. André Basset calls the Aorist ‘le thème employé sans intention particulière’ (Basset, 1952: 14). In many Berber varieties the Aorist is the aspect used as a consecutive form whose aspectual interpretation is determined by the aspect of a preceding verb (Galand, 2010: 228). In Ghomara Berber the bare Aorist figures mainly in consecutive constructions, and in a few other cases.

8.1.1.1. The consecutive Aorist
In Ghomara Berber, the consecutive Aorist is used after an initial verb which has the Perfective, Imperfective or Aorist aspectual form. The Aorist being a neutral form, it takes over the aspectual interpretation of the preceding verb (Galand 2002 [1983]: 261 calls it ‘une forme à tout faire’). In Tashelḥiyt Berber texts there may be long strings of subsequent Aorist verbs with the same aspectual value in narrative texts. In Ghomara Berber texts strings of more than one identifiable consecutive Aorist are rare.

152 According to Galand the consecutive Aorist is only habitually used after the Perfective (accompli) in the center and south of Morocco (in Kabyle and Touareg this form is limited to only to literary texts, Galand, 2002: 265).
Bentolila (1981:153-154) describes the use of the consecutive Aorist (and Imperfective) in Middle Atlas Berber as a way to firmly establish a link to the former process. The consecutive Aorist thus marks the continuity of the process, which can result in the effect of rapidity. The series of events is presented as a whole. To the contrary if a non-consecutive is used, the actions or events can be seen as ‘ilôts indépendants, sans relation, sans point de contact.’ (Bentolila, 1981: 153-154). In addition, it can describe ‘les phases d’une activité habituelle’ (Galand, 2010: 228). In Ghomara Berber the consecutive Aorist functions in the same way in that it establishes a firm link to the previous sequence of events or processes. Many verbs do not formally distinguish the Aorist from the Perfective, therefore it is often not possible to identify the Aorist. However, there are enough verbs which mark the difference, for example the high-frequency verb ddu ‘to go’. All verbs that have been identified as consecutive Aorists are action verbs. In example (1) a number of actions are described which form a coherent event.

(1) i-qqen aezbbiẓ nn-es, i-siwel i leḥsam nn-es, i-ddu
3MS-tie.up:P bull:EL of-3MS 3MS-talk:A with children of-3MS 3MS-go:A
‘He tied up his bull, talked to his children and went away.’

In stories, often the high-frequency verb ddu ‘to go’ is identifiable as an Aorist, e.g.

(2) i-leqqet abaw = ahen, i-ĝg = aṭ g lḡim nn-es, i-ddu.
3MS-pick.up:P bean:EL=S:ANP 3MS-do:P=3MS:DO in pocket of-3S 3MS-go:A
‘He picked up the bean, put it in his pocket and went away.’

(3) i-šš aferruẓ = ahen, i-leww = as aḍan nn-es iy
3MS-eat:P rooster:EL=S:ANP 3MS-wrap:P=3S:IO intestines of-3S to
isekkawen n uyizd, a yyih, i-ddu fḥal-u horns of billy.goat:EA VOC yes 3MS-go:A way-3MS
‘He ate the rooster, wrapped his intestines around the horns of the billy-goat and went away.’

Bare Aorist forms are usually the final part of a sequence. However, one can find examples, though rare, of Aorists which are not in the final position. The next example shows this clearly. In this story the story-teller, using the consecutive Aorist, jumps immediately to the part where the jackal returns to get his deposition in the morning. The speaker then adds information which belongs to the previous event again using an Aorist form, namely iffuy ‘he went away’ (the Perfective is iffey).
The use of the consecutive Aorist is a stylistic choice which remains optional. It is more consistently used in well-told stories. Evidence for this is provided by the same story told by two speakers, a man in his forties, who knows the story very well and his younger brother who does not know the story that well. The older story-teller uses the consecutive Aorist much more often. Example (5) is told by the younger brother. It is the same part of the story as example (2) above, however, instead of the consecutive Aorist, the Perfective form of the same verb is used.

Example (6) is told by the younger brother. It is the same part of the story as example (2) above, however, instead of the consecutive Aorist, the Perfective form of the same verb is used.

Example (7) is told by the younger brother. It is the same part of the story as example (2) above, however, instead of the consecutive Aorist, the Perfective form of the same verb is used.

The consecutive Aorist is not necessarily the last verb of a sequence, for example in texts when it is a main verb, as in example (6) and (7), where it is followed by a complement verb.
The bare Aorist does not appear as the initial verb in a sequence. Verbs preceding the consecutive Aorist can have different aspects. Example (8) and (9) show the Perfective aspectual forms preceding the Aorist (the Aorist of ‘to tie’ is qqun).

(8)  
\[ i\text{-}qqn = as = ten \quad i \quad u\text{e}b\text{b}iz = a\text{hen}, \quad g \quad is\text{e}kk\text{a}wen, \quad i\text{-}ddu \quad f\text{h}al\text{-}u \]
3MS-tie:P = 3S:IO = 3PL:DO to bull:EA = S:PRX in horns 3MS-go:A way-3MS
‘He tied them to the bull, to its horns, and went.’

(9)  
\[ t-e\text{-}qqn = at, \quad i\text{-}ddu \quad f\text{h}al\text{-}u \quad f\text{si} \quad n \quad ššy\text{ul} \quad nn\text{-}es \]
3FS-tie:P = 3MS:DO 3MS-go:A way-3MS after of job of-3S
‘She tied him up and left to her job.’

Example (10) shows an instance of the Imperfective stem preceding multiple Aorists.

(10)  
\[ t\text{aw}i\text{-}n = d \quad z\text{errica} \quad z\text{eg} \quad ssuq, \quad c\text{aw}ed \quad bb\text{-}en = d \quad c\text{aw}ed, \quad c\text{aw}ed \quad g\text{g}\text{-}en \]
take:I-3PL = DC seeds from market again take:A = DC again, again make:A-3PL
\[ c\text{aw}ed \quad ta\text{g}ursa, \quad g\text{g}\text{-}en \quad c\text{aw}ed \quad a\text{h}etta\text{š}, \quad ww\text{-}en \quad c\text{aw}ed \quad aw\text{ellu}. \]
again ploughshare:EL make:A-3PL again slash:EL make:A-3PL again plough:EL
‘They bring seeds from the market, and they also bring, they make ploughshares, they also make slashes and make ploughs.’

Perfect Arabic-morphology verbs can be followed by a Berber verb in the consecutive Aorist, as example (11) shows.

(11)  
\[ t\text{tfahm}\text{-}u, \quad i\text{-}ddu \quad b\text{a}ba \quad nn\text{-}sen \quad a \quad xd\text{em} \]
agree-3PL:PF 3MS-go:A father of-3PL AD [3MS-]work:A
‘They agreed, and their father went to work.’

The Imperative can be followed by a consecutive Aorist in the second person as the following text excerpt shows.

(12)  
\[ š\text{etteh} \quad a\text{xyam} \quad t\text{-}e\text{lli}\text{-}t \quad d\text{ar} \quad tu\text{g}na\text{t} \]
wipe:IMP house:EL 2S-go.up:A-2S to tu\text{g}na\text{t}’
‘Wipe the house and go up to tu\text{g}na\text{t} (part of the village).’

The initial verb can also be (š/š/d/ar) a + Aorist. In the following example the use of the non-real markers š a is shown.

(13)  
\[ u\text{-}hen \quad alef \quad š \quad a \quad su \quad i\text{-}ddu \quad f\text{h}al\text{-}u, \quad y\text{a} \quad e\text{ayša} \]
As shown in example (14) it is possible to have multiple consecutive Aorists following each other. Again, Aorists can follow any aspectual form in the sequence. The Aorists in (14) follow an initial a + Aorist. Notice that the final verb is an Arabic-morphology verb in the Imperfect. Example (15), (16), (17) and (18) are examples from elicitation where the Aorist follows an initial (Berber and Arabic-morphology) Perfective and an Imperfective.

(14) *ma ya ṭṭṣ-ay ḥetta ya settn-en iṭan g teeddist inu,*

Neg AD sleep:A-1S until AD bark:A-3PL dogs in belly:EA of:1S

*berrḥ-en ifulusen g teeddist inu, yewwt-en medden g teeddist*


*inu, i-nehq-u iy"yal g teeddist inu*

of:1S 3PL:IMPF-bray:3PL:IMPF donkeys in belly of:1S

‘I will not sleep until the dogs bark in my belly, the chickens cackle in my belly, people scream in my belly, the donkeys bray in my belly.’ (the speaker is an ogress)

(15) *iḵšem dar uxyam, i-hmu i tyerṭart,*

3MS-enter:P to house:EA 3MS-warm.up:A to hearth:EA

*i-siwel i leḥšam nn-es, i-fḥal-u*

3MS-talk:A with children of:3S 3MS-go.out:A way:3MS

‘He entered the house, warmed up at the fire, talked to his children and went out.’

(16) *ssag-u imalḥen, siwl-en i baeṭ-em, ddu-n fḥal-em*

fish:3PL:PF fish talk:A-3PL with each.other-3PL go:A-3PL way:3PL

‘They fished, talked to each other and went.’

(17) *i-teqqen acebbiz nn-es, i-siwel i leḥšam nn-es, i-ddu fḥal-u*

3MS-tie:I bull:EL of:3S 3MS-talk:A with children of:3S 3MS-go:A way:3MS

‘He always ties his bull, talks to his children and goes away.’

(18) *treṭṭal-en = t s leqseḥ. taqseḥt hamḳa,*

cover.roof:I-3PL = 3MS:DO with reed. reed:EL like.this

*i ta-yet hamḳa, i ta-yet hamḳa, i*

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153 The verbs in this example can not be distinguished from their Perfective counterparts. However, in this context one would not expect the Perfective stem to be used.
and F-S:other like.this and F-S:other like.this and ta-yet hamḵa, i ta-yet hamḵa, i ta-yet F-S:other like.this and F-S:other like.this and F-S:other hamḵa, i ta-yet hamḵa, ġģ-en fx-es akal.
like.this and F-S:other like.this do:A93PL on-3S earth:EL

‘The cover the roof with reed. One stick (of reed) like this, the other like this, the other like this, the other like this, the other like this, the other like this, and they put earth on it.’

8.1.1.2. Other uses of the bare Aorist

The bare Aorist is also found after the conjunctions ḫetta and amḵ a as in examples (19) and (20). It is not obligatory in these cases.

(19) netta i-tteymur ḫetta i-qquł meqqu
he 3MS-grow:I until 3MS-become:A big:MS
‘He grew until he became big.’

(20) amḵ a t = i-nuy, saca i-dda = d
when REL 3MS:DO = 3MS-kill:A then 3MS-go:P = DC
‘When he had killed him, he came.’

It is also used following the presentative particle ha and means something like ‘so what if ....?’ Examples (21) and (22) show such a use.

(21) ha šš-en = t
PRES eat:A-3PL = 3MS:DO
‘So what if they eat it?’

(22) ha ddu-n
PRES go:A-3PL
‘So what if they go.’

8.1.1.3. The Aorist with non-real marker

The Aorist aspect with a pre-verbal element expresses a non-realised happening or event. This is different from the other aspectual stems which describe a concrete, real event. It often expresses the value future, possibility, probability and wish (cf. Bentolila 1981: 146). The preverbal non-real marker is a, which immediately precedes the verb. The non-real marker causes attraction of verbal clitics (cf. IV.3.3. on clitic position).
8.1.1.3.1. š and a

Examples of the use of a + Aorist to express possibility, probability and wish are given in the next examples:

possibility

(23) wella a d=i-bb lmaqal inši, tafellunt inši
or AD DC=3MS:bring:P frying.pan some earthenware.frying.pan:EL some
‘Or he brings a frying pan, an earthenware frying pan.’

probability

(24) laba n=i-nuɣ, a y=ny-en s rrekla inši
so.that.not 3PL:DO=3MS:kill:A AD 3MS:DO=kill:A:3PL with kick some
‘So that he will not kill them, they will kill him with a kick or so.’

wish

(25) a xalti, a šebb-et aqbay=aḏ, a y=ḡ-et
o aunt, AD [2S:]grab-2S billy.goat=S:PRX AD 3MS:DO=[2S:]leave:A:2S
dha yr-em
here at-2FS
‘O aunt, take this billy goat and leave it here with you.’

Very often the non-real marker a is preceded by the borrowed preverbal element š which adds a degree of certainty or desire to the meaning\(^{154}\) (cf. 8.2.4. below on preverbal š in Arabic loans). It is the default way to refer to the future. This difference is quite subtle, as will be shown by a number of text excerpts. The first example is about a partridge in a sealed-off room, and the use of š indicates the certainty that the partridge will get out.

(61) te-nn=as: mki t-ḵešm-et, š a perper, 3FS:say:P=3S:IO if 2S:enter:P-2S FUT AD [3MS:]fly:A
š a ffey ḥal-a. FUT AD [3MS:]go.out:A way:3FS
‘She said: If you go in, it will fly, it will get out.’

\(^{154}\) The variant baš is used in the neighbouring dialect of Amṭiqan. This particle also precedes the non-real marker a.
In another story, a horse wants to get back the turtle’s wife (the frog) after several failed attempts by other animals. The horse tells the sad turtle the same thing as its predecessors, using the non-real particle a:

(27) \( i\text{-}nn = a \quad ddu = x \quad a \quad k = d = rri = ded \quad a \quad sahiba. \)

Then he said: I will get her back, friend.’

The turtle replies by saying that several attempts have been made, but nobody has succeeded. The horse replies with the same phrase, except that this time he adds the preverbal š to the nonreal to emphasise that he will certainly bring her back. This shows how a degree of certainty of a non-realised event is added by means of this particle.

(28) \( i\text{-}nn = ha \quad nekk \quad š \quad a \quad ddu = x \quad a \quad k = d = bba = ded \quad 2\text{MS:IO} = DC = \text{take:A-1S} = DC:3\text{FS:DO} \quad \text{o friend} \)

‘He said: I will go and bring her back.’

The element š cannot be used with verbal complements nor does it appear in relative clauses.

8.1.1.3.2. maš

The non-real particle maš is borrowed from Arabic and stands in the same position as š. This particle is only used by speakers who are over sixty years old. It differs from š in that it is mostly only used with the initial verb of a sequence, e.g.

(29) \( maš \quad a \quad guzu \quad ilaxirihi \quad g \quad lbir, \quad š \quad a \quad d = i\text{-}seeli \quad d\text{d}may \quad n \quad lefqi \quad \text{head of imam} \)

‘He will go into the well and get out the head of the imam.’

The two particles express similar meanings. As noted above, š adds a degree of certainty or desire to the non-real, as does maš. However, maš may be even more emphatic about the certainty of a certain event. The next example illustrates such a difference. In the preceding text the speaker has been speaking about using a sickle. One has to be experienced to use such a dangerous object, otherwise one will certainly cut one’s hand. This emphasis on the fact that it is certainly going to happen is expressed by the use of maš. In example (30) maš
is used in initial position, whereas example (31) is one of the few examples where maš does not occur initially.

(30) *ssbeč tlaqa yan iši g umaras. i-nn = as:
lion encounter[:3MS:PF] one:M some in riverbed:EA 3MS-say:P = 3S:IO
maš a k = šš-ax.
FUT AD 3MS:DO = eat:A-1S
‘The lion encountered someone in the riverbank. He said: ‘I’m going to eat you.’

(31) *ma w-a lla ma ye-ssen a mger š
as.for M-S:PRH be:R NEG 3MS-know:P AD [3MS]-harvest:A FUT
a sekker hamḵa maš a qeṭṭec afus
AD [3MS]-do:A like.this FUT AD [3MS]-cut:A hand:EL
‘However, he who does not know how to harvest, will do this (shows it) and cut his hand.’

8.1.1.3.3. ar

The preverbal particle ar is used instead of š in subordination: in relative clauses (including content questions) and after certain conjunctions. It is followed by the non-real marker a. ar a can also occur in non-subordinated contexts, although there are very few instances in my corpus. In this position it varies with š / maš. It is not clear whether there is a semantic difference between ar and š / maš. It cannot be combined with them. An example is:

(32) *a rfeɛ, d a rfeɛ, d a rfeɛ, d
CRT AD [3MS]-lift:A CRT AD [3MS]-lift:A CRT
a rfeɛ eišrin kilu
‘I will go directly to eat his children.’

8.1.1.3.4. d

The preverbal non-real particle a can be preceded by an element d. It adds a modal meaning of emphasis comparable to English ‘certainly, without a doubt, indeed.’ This particle is identical to the element d used in Aït Seghrouchen Berber (cf. Bentolila, 1981:173). The following examples illustrate the use of the preverbal marker.

(33) *leqnīṣṭa = yahen d a rfeɛ, d a rfeɛ, d
box = S:ANP CRT AD [3MS]-lift:A CRT AD [3MS]-lift:A CRT
a rfeɛ eišrin kilu

155 The fact that ar is a separate element from a is shown by its use with Arabic-morphology verbs where it has the form ar. The non-real particle a can only occur before Berber-morphology verbs (cf. IV.8.1.1.3.1.).
AD [3MS-]lift:A twenty kilo

‘The box will certainly carry twenty kilograms.’

(34) iwa amella, keğ ma ar a gê-et, š a
well now:EL, you:MS what FUT AD [2S-]do:A-2S FUT AD
ttru-t εawed? a i-ʾn = as: nekki d a
[2S-]cry:A-2S again well 3MS-say:P = 3S:IO I CRT AD
ttru xa ḥetta ya ṛz-ay isekkwen inu.
cry:A-1S until AD break:A-1S horns of:1S

‘And now, what are you going to do, are you going to cry again? He said: I will indeed cry until I break my horns.’
8.1.2. The Perfective

The Perfective oscillates between on the one hand a dynamic and on the other hand a (resultative) stative meaning (cf. Mettouchi, 2003 and Galand, 2010:207-224 on the stative-dynamic opposition in other Berber languages). Many stative verbs allow for a dynamic as well as a stative interpretation depending on the context (e.g. become hungry vs. be hungry), and one could interpret the stative usage as a resultative. In this regard, verbs are different from the purely stative active and passive participles and the adjective which generally express ‘pure’ stative value. The extensive use of the participles may be the reason behind the low frequency of stative Perfectives in Ghomara Berber in comparison to other Berber languages. In the following example the use of a resultative verb is illustrated. In the example the Perfective verb iqqur ‘be dry’, which can be interpreted as a result, is on the same level as the adjective xḍer ‘be green’ which is a state.

(35) i  lɛafya  nepssruɣ=at   s  isɣaren,  asɣar n  tezغا,
and  fire  1PL-lite:1=3FS:DO   with  sticks  stick:ELof  forest:EA
asɣar  i-qqur, maši xḍer
stick:EL  3MS-dry:P  NEG  green:MS
‘And we lite the fire with sticks, sticks from the forest, dry sticks, not green ones’

A resultative interpretation is possible as well. If the adverb deyya is used the interpretation is that of ‘becoming dry’. The interpretation is that of a resultant state.

(36) asɣar=ahen   i-qqur   deyya
stick:EL=S:ANP  3MS-dry:P  quickly
‘The stick has become dry quickly’

Another example of a resultative verb is lluẓ ‘to be hungry’. For this verb we have a corresponding adjective. The difference between the verb and the adjective can be shown by using the adverb deyya ‘quickly’. If ‘being hungry’ is the outcome of a process then the use of the adverb should result in a grammatical expression, which is indeed the case. As resultatives imply a process, the expression can therefore be interpreted as ‘becoming hungry’ as well, in other words, as a resultant state. Compare examples (37) and (38).

(37) lluẓ-ax
be.hungry-1S
‘I’m hungry.’

(38) lluẓ-ay   deyya
be.hungry-1S   quickly
‘I’ve quickly become hungry.’

The corresponding adjective is a pure state. It cannot be accompanied by the adverb deyya ‘quickly’, e.g.:

(39) *neikki ḡičan deyya
I hungry:MS quickly
‘I’m hungry quickly’

Another example is the contrast between the verb hlek ‘to be sick’ and the corresponding passive participle meedum ‘sick’. The verb allows for the adverb deyya whereas the stative passive participle does not. This means that example (40a) and (40b) are best considered resultatives, implying a preceding process, whereas (41) is a pure state.

(40a) aceyyal nn-es i-hlek
boy:EL of-3S 3MS-be.sick:P
‘His child is sick.’

(40b) aceyyal nn-es i-hlek deyya
boy:EL of-3S 3MS-be.sick:P quickly
‘His child has become sick quickly.’

(41) *aceyyal nn-es meedum deyya
boy:EL of-3S be.sick:PP:MS quickly
‘His child is sick quickly.’

Furthermore it is possible to use the adverb amilla ‘now’ in combination with the passive participle whereas the Perfective does not allow the same adverb.

(42) neikki meedum amilla
I be.sick:PP:MS now:EL
‘I’m sick now.’

(43) *neikki helk-ay amilla
I be.sick:P-1S now:EL
‘I’m sick now.’

The stative verb ‘to know’, which does not have an Imperfective form, shows the same behaviour. In the Perfective it can be combined with deyya implying a process resulting in a
state, whereas the active participle does not allow such an interpretation. In the latter case it can only be interpreted as a pure state. Compare examples (44) and (45).

(44) i-ssen medden = ihen deyya
3MS-know:P people = PL:ANP quickly
‘He knows those people quickly.’

(45) *netta caref medden = ihen deyya
he know:AP:MS people = PL:ANP quickly
‘He knows those people quickly.’

However, there are a few contexts where the difference between the Perfective and the passive participle is not maintained and where the resultative meaning of the Perfective is less conspicuous. This is the case of the following examples (both accepted in elicitation), in which the sketched situation cannot be viewed as the result of a process.

(46) iɛṛaḇen  ḍewwṛ-en = tet iyallen
Iraben surround-3PL = 3FS:DO mountains
‘Iraben is surrounded by mountains.’ (lit. ‘Iraben, mountains surround it’)

(47) iɛṛaḇen mḍewwṛpa s iyallen
Iraben surround:PP:FS with mountains
‘Iraben is surrounded by mountains.’

One could say that the Perfective has a dynamic value, which can be interpreted as a resultative. Examples of transitive and labile verbs are shown here:

(48) ye-wt = at, i-ny = at
3MS-hit:P = 3MS:DO 3MS-kill:P = 3MS:DO
‘He hit him, he (has) killed him…’

(49) lkas i-reg
glass 3MS-break:P
‘The glass is broken.’

(50) argaz = ahen i-reg lkas
man:EL = S:ANP 3MS-break:P glass
‘That man broke the glass.’
8.1.3. The Imperfective

The Imperfective expresses habitual, iterative, durative and progressive meanings. A particular use of the Imperfective is the sequential. The habitual refers to a process that occurs habitually or regularly. In example (51) such a habitual is used. A closely linked use of the Imperfective is the iterative in example (52). Example (53) shows the use of the durative.

(51) i-nn = as: i-ttᵢᵣ u dar-i yan ḏgmel.
    3MS-say:P = 3S:IO 3MS-go:I to-1S one:M camel
    ‘He said: ‘A camel comes to me.’

(52) ku nnḥar i-ttuṭu = d w-ayet dar ƚbīr =  ʿd
    every day 3MS-go:I=DC M-other:S to well=5:PRX
    ‘Every day the other one came to this well.’

(53) ẓeḥḥa i-tṭiš netta i ẓeemma nn-es
    Jeha 3MS-live:I he with mother of-3S
    ‘Jeha lives with his mother.’

The durative Imperfective can be used to express general truths, as in the following example.

(54) asyaɾ = ahen xḍ̱er, i-sskar dduxxan
    stick:EL=S:ANP green:MS 3MS-do:I smoke
    ‘Fresh sticks produce a lot of smoke.’

A minor use of the habitual Imperfective is similar to the use of the bare Imperfect in Moroccan Arabic for describing an inevitable situation (cf. Caubet, 1993: 167 - 168). In the following example the Imperfective follows two instances of direct speech.

(55) ne-qqr = asen :
    1PL-say:I = 3PL:IO ‘a weddi nuḵna  lbḥrîyya g  lbarku flani.
    VOC dear we fishermen in ship so-and-so
    he-ttaka-t = as  lmeelumat ana he-lla-t xeddam.
    2S-give:I-2S = 3S:IO information where 2S-be:P-2S work:AP:MS
    i-qqr = aḳ:
    3MS-say:I = 2S:IO give:IMP paper [2S-]give:I-2S = 3S:IO paper
    ara  lkağıṭ. ttaka-t = as  lkağıṭ,
    3MS-look:I in-3S God 3MS:IMPF-help
    i-tɛawen ga-s  ʾlḥah i-tɛawen.
‘We say: We are fishermen from that boat. You give him the information where you are working. He tells you: Give me the paper. You give him the paper, he looks at it, bye bye.’

The Imperfective is used for expressing the progressive, for example:

(56) \( s\ae \ i\text{-berreh} \ x \ y\a \ urgaz, u\text{-hen} \ a \ s=i\text{-qqers-en.} \)

then 3MS-call:P on one:M man:EAM-S:ANP REL 3S:IO=RF-slaughter:I-RF

\( k\at\text{-semma} \ i\text{-tmeddın} \ tuzzalt s \ a \)

IMPP-3FS:IMPF-be.called 3MS-sharpen:I knife FUT AD

\( t=i\text{-yṛes.} \)

3MS:DO = 3MS-slaughter:A

‘Then he called a man, the one who will slaughter for him. He was sharpening the knife to slaughter it.’

(57) \( n\et\ i\text{-twala} \ lm\yta \ in\i. \ m\edd\en \ in\i. \ g \ lm\qa\q\b\i\r, \)

he 3MS-see:I corpse some people some in graveyard

\( g \ lm\q\a\q\b\er \ t\em\r\en \ lm\yta \ i\i \)

in graveyard bury:1-3PL dead.person some

‘He saw a corpse. In the graveyard, they were burying a dead person.’

A number of semantically defined verbs use the Arabic active participle to express the progressive. The Imperfective of these verbs does not express the progressive aspect. In section 8.3. and 8.4. on Arabic participles this issue will be discussed further.

8.1.3.1. The sequential Imperfective

The sequential Imperfective is used to focus on an event that happens immediately after a preceding event. This usage is identical to the usage of the Imperfective with the preverbal element \( k\a \) in Moroccan Arabic (cf. Caubet, 1993: 195-198 who calls it ‘mettre en vedette’).

The sequential Imperfective always follows another verb and cannot be the initial verb in a sequence. A topicalised (pro)noun often precedes the consecutive Imperfective. Example (58) shows the use of a sequential Imperfective.

(58) \( i\z\u \ u\et\ma-s \ a \ d\du \ y\a \ h\am\ka \ s\i \ h\a\z\a, \)

3MS-let:P sister-3S AD [3FS-]go:A only like.this some thing

\( l\m\a\sa\f a \ y\n\i \ h\am\ka. \ i \ n\et\a \ i\text{-tteggez} \ x \ u\q\e\mm\um \)

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distance some like this and he 3MS-go.down:I on mouth:EA

‘He let his sister go a little bit, some distance. And then he went down (I) on his mouth.’

There can be multiple sequential Imperfectives in a row. The sequence can be broken by the use of another aspectual form, in this case the Perfective, after which the Imperfective is used again, e.g.

(59) t-šebbṛ zga-s aqbay = ahen, te-qqn = aṭ i lefḥula. 3FS-grab:P from-3S billy.goat = S:ANP 3FS-tie.up:P = 3MS:DO with cattle.
g bellil i-teqqel dar-es, i-tett aytḥd = ahen, i-šebbṛ
at night 3MS-return:I to-3MS 3MS-eat:I billy.goat = S:ANP 3MS-grab:P
aḏan = ahen i-tekwwa = as = ten eawed
intestines = S:PRX 3MS-wrap:I = 3S:IO = 3PL:DO again
i uebbīz a y-muqqr-in.
with bull:EA REL RC-big-RC.

‘She took the billy goat from me, tied him together with the bulls. At night he went back to it, ate that billy goat, took the intestines and wrapped them around the biggest bull.’

The most frequently occurring verb in our text corpus used in this way is af ‘to find’. The next example illustrates such a use.

(60) i lyula = yahen te-ffey berṛa, he-ttaf = ahen gals-in and ogress = S:ANP 3FS-go.out:P outside 3FS-find:I = S:ANP sit:AP-PL

‘And the ogress went out and (suddenly) found them sitting.’

The use of the sequential Imperfective is a matter of choice. Other aspectual stems can be used in the same context, as the examples (61) and (62) show. In this recurring sentence in a fairy tale, example (61) has a Perfective which is followed by a sequential Imperfective, while example (62) has two Perfectives.

(61) a mni, kkr-ay g ṣṣḥaḥ ttaf-ay ya yaḏan nn-es o son, get.up:P-1S in morning find:I-1S only intestines:EL of:3S mlewwa-in iq ḫaššakwen n uytḥd wrap:PP-PL with horns of billy.goat:EA

‘My son, I woke up in the morning and found (I) his intestines around the horns of the billy-goat.’
The sequential Imperfective can be preceded by any type of aspectual form, including the Imperfective and participles, be it a Berber-morphology or an Arabic-morphology verb, for example:

(62) a mni, kkr-ay g sšbaḥ uf-ay ya yaḏan nn-es o son, get.up:P-1S in morning find:P-1S only intestines:EL of-3S mlew-in i ḫaṛen n lebhima. wrap:PP-PL with legs of mule ‘My son, I woke up in the morning and found (P) his intestines around the legs of the mule.’

After the causal coordinator semmen ~ semm a ‘so that’ the Imperfective is used. The value of the Imperfective is that of a non-real. Some examples are:

(63) ka-de-wqee ilaxirihi lehrawa, i tmeṭṭuṣ t-ruggl = as. IMPP-3FS:IMPF-happen etc. stick and wife:EA 3FS-flee:I = 3S:IO ‘Then fighting happens and the wife flees (I).’

(64) maši id izref i netta i-tett tay=’lalt = ahen go:AP:MS with road:EA and he 3MS-eat:I pea-soup:EL = S:ANP ‘He is going along the way and eating (I) the pea-soup.’

(65) netta ye-dda s a qleḥ hamkaḏinet i he 3MS-go:P FUT AD [3MS-]turn.around:A like.this and ‘He turned around like this and then fell (I) netta i-ttasa=d g wammas nn-sen ‘ddaf’. he 3MS-land:I = DC in middle:EA of-3PL bam amongst them ‘bam’.

(66) wt= ay s lehzam semm a teqql-ax tameṭṭuṣ. hit:IMP = 1S:DO with belt so.that REL become:I-1S woman:EL ‘Hit me with the belt, so that I will become a woman.’

(67) nqes ši ḫaža zeg leflaḥa=yahen semmen a reduce:IMP some thing from crops=S:ANP so.that REL h-teffyy-et fhal-ek 2S-go.out:1-2S way-2S ‘Reduce some of those crops so that you can go out.’
8.2. Arabic-morphology verbs

In this section the aspect of Arabic-morphology verbs will be discussed. This type of verb keeps all aspects of Arabic morphology including the preverbal particle for the Imperfect \( \text{ka-} \) (cf. III.8.). In Ghomara Berber the Arabic Perfect (or: suffix conjugation), the Arabic Imperfect (or: prefix conjugation) and the active and passive participles form an integral part of the verbal system. In most of the discussion on aspect in Arabic the analysis by Caubet will be followed (1993: 155-251, cf. also Maas, 2011: 83-88). In the presentation each of these categories will be discussed separately, focusing on how the Arabic system interacts with the Berber system. The role of concomitance, which plays an important role in the aspectual system, will be discussed as well.

8.2.1. The Perfect

The Perfect basically distinguishes two values: a dynamic and a resultant state (which differs from the pure stative expressed by the participle). In this respect the system does not differ from the Berber-morphology Perfective. The following examples show the dynamic use of the Perfect.

\[(68) \quad \text{ma} \quad \text{dda}=\text{d} \quad \text{dariha} \quad \text{ḥetta} \quad \text{xwa-w} \quad \text{sswasa} \quad \text{NEG} \quad \text{go:P"3PL=DC} \quad \text{to.here until} \quad \text{leave-3PL:PF} \quad \text{Soussis} \quad \text{‘They only came here after the Soussis left.’} \]

\[(69) \quad \text{ṣṣaḍ-na} \quad \text{bezzaf} \quad \text{n} \quad \text{imalḥen aṭḡam} \quad \text{fish-1PL:PF} \quad \text{a.lot of fish} \quad \text{yesterday:EL} \quad \text{‘We caught a lot of fish yesterday.’} \]

In example (70a) the Perfect resultative verb presents a state. The verb \( \text{wžed} \) ‘to be ready’ presents the situation as a result of a previous event that has implications for the contextual situation described. It implies a preceding process. This can be contrasted with the corresponding active participle shown in (71a) which presents a pure state. The adverb \( \text{deyya} \) ‘quickly’ only combines with the Perfect as shown in (70b) and not with the active participle (71b).

\[(70a) \quad \text{kerz-en} \quad \text{iḥawen, wežḏ-u} \quad \text{iḥawen, wežḏ-u} \quad \text{iḥawen,} \quad \text{cultivate:P-3PL beans \quad be.ready-3PL:PF beans \quad be.ready-3PL:PF beans} \quad \text{ḡğa-n} \quad \text{tixerruṭan.} \quad \text{make-3PL \quad fruits:EL} \]

\[(71b) \quad \text{ma} \quad \text{bɜɛn=ɛ} \quad \text{ɜsurname} \quad \text{sidana} \quad \text{saw} \quad \text{ɜnam.} \quad \text{NEG \quad go:P-3PL=DC \quad to:home \quad arrive \quad come} \quad \text{‘I came home just now.’} \]

\[156\] Other preverbal particles such as \( \text{š}, \text{d}, \text{ar} \) do not belong to this category. They occur before Berber-morphology verbs as well and should therefore be considered independent elements.
'They planted beans, the beans were ready, the beans were ready, they had fruit.'

(70b) *weżd-u  ibzağen  deyya
be.ready-3PL:PF  beans  quickly
‘The beans have been quickly cooked.’

(71a) ibzağen = ihen  wažd-in
beans = PL:ANP  be.ready:AP-PL
‘The beans are cooked.’

(71b) *ibzağen  wažd-in  deyya
beans  be.ready:AP-PL  quickly
‘The beans are cooked quickly.’

In the case of verbs expressing a mental state such as fhem ‘to understand’ the same difference between the Perfect and the active participle is found. For example in (72) deyya can be combined with the Perfect while the active participle in example (73) does not allow this adverb.

(72) nekki  deyya  fhem-t  lhedra  nn-es
I  quickly  understand-1S:PF  speech  of-3S
‘I quickly understood his speech.’

(73) *nekki  deyya  fahem  lhedra  nn-es
I  quickly  understand:AP:MS  speech  of-3S
‘I quickly understood his speech.’

8.2.2. The Imperfect with ka-

The Arabic form ka- + Imperfect basically covers the same aspectual distinctions as the Berber Imperfect: the habitual, the iterative, the durative and the progressive. The sequential Imperfect is expressed by the Arabic Imperfect as well. In a few contexts the preverbal marker does not occur, only the bare Imperfect is used. The preverbal markers š, maš, ya, d and ar can precede the Imperfect stem. Each of these is discussed below. The Arabic Imperfect preceded by the ka- prefix expresses the habitual in the following example. The Arabic Imperfect with a habitual meaning follows the Berber Imperfective.

(74) yemma  nn-es  he-tzalla,  ka-de-čeqd  ɪlḥah,  netta  lla
mother  of-3S  3FS:pray:IMPP-3FS:IMPF:worship God  he  no
‘His mother prays, she worships God, he does not.’
A usage which is close to the habitual is the iterative. In the following example a passive verb is used to express the iterative. This iterative event is stressed by repeating the verb. In the example it is preceded by a number of Imperfective Berber-morphology verbs.

(75) $n$-tawi = $d$ lhebb, $n$-degg = $a$ $g$ lmegra = yahren,
1PL-take:I=DC barley 1PL-put:I=3MS:DO in frying.pan:S:PRX
‘We take barley, we put it in that frying pan,
ne-qqely = $a$, iwa, netta ka-y-$tt$-eqla,
1PL-fry:I=3MS:DO well he IMPP:3MS:IMPF:PASS-fry IMPP:3MS:IMPF:PASS-fry
we fry it, well, it is being fried and fried…’

An example of the durative is:

(76) legmula = ihen, $m$ a $n$=y-uyu-n ka-y-$ḍ$af-u?
‘Those camels, how come they are losing weight?’

In the following example the use of the progressive aspect is shown:

(77) leḥsam = ihen msaḵen, qqim-en das msaḵen ttalaṣ-ṣ-en,
children = PL:ANP poor.people stay:P-3PL there poor.people be.afraid:I-3PL
‘Those poor children, they stayed there being afraid,
sskar-en hamkha. ka-y-reṣ-u msaḵen
do:I-3PL like.this IMPP:3PL:IMPF:shiver:3PL:IMPF poor.people
they did like this, they were shivering.’

The Imperfect can be used, as with Berber-morphology verbs, to express a sequential event. In the part above it was shown that the Berber Imperfective expresses ‘succession of events’ in this way (cf. 8.1.3.1. above, cf. also Caubet 1993: 195 for Moroccan Arabic).

(78) i-sanna = $a$ x lehima $nn$-es, $i$-šebber $i$-ǧ-es azref.
3MS-put:P=3FS:DO on mule of-3S 3MS-grab:P with-3S road:EL
netta ka-y-$t$t-qa yah tmeṣra maḏ-a.
he IMPP:3MS:IMPF-meet one:F wedding:EA come:AP-FS
‘He put her on the mule and started travelling with her. Then he encountered a wedding.’
8.2.3. The bare Imperfect

The Imperfect without a preverbal element can be used in a number of contexts including the potential, the future, but also wishes and injunctions. It can also be used as a consecutive, similar to the Berber Aorist. We do not include in this discussion the Imperfect in dependent clauses.

The next examples illustrates the use of a bare Imperfect indicating a potential event.

(79) a y=te-lqet tafulust inši n-zedq-u
AD 3MS:DO=3FS-pick.up:A chicken:EL some 1PL:IMPF-end.up-1PL:IMPF
nekki i kegín g thešuman
I and you:MS in embarrassment
‘A chicken will pick it up and we will end up being embarrassed.’

(80) d a ḵ=bb-en is-sen dar uxyam
CRT AD 2MS:DO=take:A-3PL with-3PL to house:EA
w iʔamnpu gapḵ
and 3PL:IMPF-believe-3PL: IMPF in-2MS
‘They will take you home and they will trust you.’

The following example illustrates an injunction.

(81) yāllah ne-šsad-u a sahabi
come.on 1PL:IMPF-fish-1PL:IMPF o friend
‘Come on, let’s go fishing my friend.’

Following ḥetta ‘until’ the bare Imperfect is used as the following examples show.

(82) ma xeṣṣ = aḵ šī a qqim-et dhaqi ḥetta
NEG need:P = 2MS:IO NEG AD [2S]-stay:A-2S here until
y-fuṭ = l-ek, ḥetta i-fuṭ lpaspur awella?
3MS:IMPF-pass=IO-2MS until 3MS:IMPF-pass passport or
‘You must not stay here until it expires, until the passport expires, don’t you?’

The following fragment, already given above, shows the use of the consecutive Imperfect after a series of Berber-morphology Aorist forms.
‘I will not sleep until the dogs bark in my belly, the chickens cackle in my belly, people scream in my belly, the donkeys bray in my belly.’

8.2.4. The preverbs š, maš, ya, d, ar

The non-real element a does not occur before Arabic-morphology verbs. As in the case of the Berber Aorist the preverbal marker š adds a nuance of certainty or desire to the non-real Imperfect. Berber has borrowed this preverbal marker as we have seen in 8.1.1.3.1. above. An alternative marker is maš which is less frequent and mainly used by older speakers. Furthermore, to a lesser extent the Moroccan Arabic koiné variant ya is encountered as well. The latter variant occurs only with one single younger speaker. In the following examples the use of š is illustrated. In example (84) it is used in a sequence of verbs which includes Berber Aorist forms and Arabic Imperfects preceded by š, all stressing the certainty of the occurrence of the non-realised event.

(84) š i-ɛiq-u  idq-es, š a y = ūš-en,
FUT 3PL:IMPF-be.aware-3PL:IMPF with-3S FUT AD 3MS:DO = eat:A-3PL
‘They will notice him, they will eat him,
š a bəzɛd, š a qeṭṭr-en  fx-essen.
FUT AD [3MS-Jurinate:A FUT AD drip:A-3PL on-3PL
he will urinate, they (the drops) will drip on them.’

The next example provides another instance of the use of š preceding an Arabic Imperfect.

(85) mki ne-dda ḥetta tfereq-na, š i-eiss-u = l-i
if 1PL-go:P until split-1PL:PF FUT 3PL:IMPF-guard-3PL:IMPF = IO-1S
aḡdi  ulla  nnmer
jackal:EL or leopard
‘If we go until we split up, the jackal or the leopard will watch me.’

157 On the basis of Berber-morphology verbs only it would be impossible to decide whether the elements are ša / š a, maš / maša, da / d a or ara / ar a.
158 In the neighbouring dialect of Amṭiqan the variant baš is used in Berber as well as in Arabic. The speakers from this village living in Bou Ahmed use this variant.
The next example shows the use of maš preceding an Arabic Imperfect. As pointed out before, maš may stress the certainty of a non-real event (cf. 8.1.1.3.2. above).

(86) **maš n-teašтр-u**
FUT 1PL:IMPF-accompany-1PL:IMPF
‘We are going to accompany each other.’

The Arabic koinè form ya occurs only in the Berber speech of a young person (16 years old) who uses it interchangeably with š. The full variant of the particle, yadi, is considered unacceptable. In the following example the use of ya is illustrated.

(87) **saça, i-dda argaz = ahen maɛat ya y-şşadţi,**
then, 3MS-go:P man:EL=S:ANP don’t.know FUT 3MS:IMPF-fish
‘Then, that man went, I don’t know what he is going to hunt, he went to the forest,
i-dda dar teẓga maɛat šw a ar a sekker
3MS-go:P to forest:EA don’t.know what REL FUT AD [3MS]-do:A
I don’t know what he was going to do’.

In the following examples the elements **d** and **ar** are shown. As these elements These examples are from elicitation as they don’t appear with Arabic-morphology verbs in our text corpus. The element **d** the modal value of certainty to the non-real event (cf. 8.1.1.3.4. above), for example:

(88) **d i-şşadţi-u**
CRT2 3PL:IMPF-fish-3PL:IMPF
‘They will certainly fish.’

As pointed out before, the element **ar** is possible in non-relative contexts and then has the same function as š.

(89) **alaẓen ar i-şşadţi-u beḵri**
tomorrow:EL FUT 3PL:IMPF-fish-3PL:IMPF early
‘Tomorrow they will fish early.’

### 8.3. The active participle

In Moroccan Arabic the active participle is a widely used form. It has a special place in the verbal system in that it covers a broad range of aspectual and modal functions. Caubet (1993: 221-248) discusses its use extensively. According to her analysis the active participle is essentially a concomitant. Depending on the verb it can express different values such as
progressive, prospective and resultative Perfect. It has some modal uses as well. Caubet (1993) distinguishes three verb classes based on their semantic composition, two of which make use of the active participle. The first class of verbs contains movement verbs, verbs of mental and body activities and quality verbs (cf. Caubet, 1993: 228). This situation is also found in Ghomara Berber where the Arabic active participle expresses the progressive (or: actuel in Caubet’s words) with the verbs belonging to this class. For this particular group of verbs, this has resulted in a split between the progressives, for which the active participle is used, and the habitual (and related) aspect, for which the Imperfective / Imperfect are used. For all other verbs which have an active participle (Caubet’s class 2), the active participle in Ghomara expresses a non-resultative state. At this point Ghomara Berber is different from Moroccan Arabic as described by Caubet, where the active participle in these classes is rather a resultative (parfait). In addition, it is possible to use the active participle to express a prospective by adding an adverb, but it is not possible to situate it in the past.

The following examples show class I verbs which express the progressive.

(90) nekki maši dar uxyam
    I go:AP:MS to house:EA
    ‘I am going home.’

In the following example the past time marker aḡ / aḵ + Il precedes the verb.

(91) nukna aḡ ne-ll mašy-in dayr-ek a yen = te-ḥtu-t
    we PST 1PL-be:P go:AP-PL at-2MS AD 1PL:DO = 2S-divide:A-2S
    leḥšam nn-ax
    children of-1PL
    ‘We were heading towards you for you to select our children.’

Contrary to other participles, the progressive use of the active participle is dynamic in nature. This can be shown by a phrase that contains the adverb deyya ‘quickly’, for example:

(92) nettaṭa mażż-a fsir-sen deyya
    she come:AP-FS behind-3PL quickly
    ‘She quickly came after them.’
The active participle can be used to express the prospective, for example:

(93)  
alaẓen  nekki  taleɛ

   tomorrow:EL   I   go.up:AP:MS
   ‘Tomorrow I will go up.’

(94)  
alaẓen  nekki  haṛeb  zeg  lmuṭee = ad

   tomorrow:EL   I   flee:AP:MS   from   place=S:PRX
   ‘Tomorrow I will flee from this place.’

Other active participles indicate a state without the implication of a preceding stage. Contrary to the active participle used as a progressive, the adverb deyya can not be combined with these active participles. In examples (95) and (96) there simply is a state without any implication of a preceding process. In example (95) the suppletive active participle of the movement verb bded ‘to stand up’ is used. Example (96) is an example of the use of the active participle of the verb qqim ‘sit’.159

(95)  
netta  waqef  argas = ahen  g  teggurt

   he     stand:AP:MS   man:EL=S:ANP   in   door:EA
   ‘That man was standing in the doorway’

(96)  
zeg  waṭgam  nuḵna  gals-in   dha

   from   yesterday:EA   we   sit:AP-PL   here
   ‘We have been sitting here since yesterday.’

The following example illustrates the stative value of the active participle. In example (97) the active participle cannot combine with adverbs indicating a time span. A Perfect/resultative interpretation is not possible. Instead, as example (98) shows, in such cases the Perfective (or: Perfect) has to be used.

(97)  
*nukna  şaym-in   telt  eyyam

   we   fast:AP-PL   three   days
   ‘We have been fasting three days.’

159 During fieldwork there was a discussion between speakers pertaining to the phrase zeg waṭgam nuḵna galsin dha ‘We have been sitting here since yesterday.’ One speaker suggested that this was not ‘real’ Berber because the active participle gales is used. He proposed an alternative with the Imperfective: zeg waṭgam nuḵna ntyima dha ‘We have been sitting here since yesterday.’. None of the other speakers accepted this and eventually the speaker who proposed this agreed with them.
(98) **nuƙna n-šam telt eyyam**

we 1PL-fast:P three days

‘We have fasted / been fasting three days.’

The active participle of verbs such as **qra** ‘to learn’ also presents a state. Even though example (99) could be interpreted as a resultant state (or Perfect), example (100) shows that the active participle cannot be followed by the adverb **deyya**, implying a state and not a process (**deyya** does combine with the Perfective **qra**).

(99) **tabrət = ad, nekki qarı = ha**

letter:EL = S:PRX I read:AP:MS = 3FS:DO

‘This letter, I have read it.’

(100) *netta qarı tabrət = ahen deyya

he read:AP:MS letter:EL = S:ANP quickly

‘He has read the letter quickly.’

The active participle can be repeated several times to indicate an ongoing event. In the following example it is preceded by the auxiliary verb **qqim** ‘to stay, sit, keep on’ (cf. 3.1.2.3. on secondary predicates).

(101) **qqim-a-n mašy-in, mašy-in, mašy-in dar ḍḍaw = ahen**


‘They kept on walking, walking, walking towards the light.’

8.4. The passive participle

The passive participle is frequently used in Ghomara Berber. It is used both attributively and as predicatively. Passive participles are non-verbal predicates that are derived from verbs (cf. Caubet 1993: 49, cf. III.10.1.). They can be derived from transitive as well as from intransitive verbs. They can only function intransitively. Passive participles always express states, and do not imply any preceding process whatsoever. The following examples illustrate passive participles in texts. In the examples the use of passive participles modifying a noun, and the independent use are shown.

(102) **ağ lla-n zznus-en kawkaw, ḫawwen, ḫummis mmelh-a,**

PST be:P-3PL sell:1-3PL peanuts beans chickpeas be.salted:PP-FS

ifaxawen mmelh-in

beans be.salted:PP-PL

‘They sold peanuts, beans, salted chickpeas, salted beans.’
(103) lla, netta mestanes id iyežden u kda
no he be.used.to:PP:MS with billy.goats and thing
‘No, he is used to billy-goats and so forth.’

(104) tsemmay-en = teg tamezgida awzeqqr,
call:1-3PL = 3FS:DO mosque:EL awzeqqr:EL
mebniry-a g ya n yağer mosedeq x tamezgida.
built:PP-FS in one:M of field:EL give.to:PP:MS on mosque:EA
‘They call it the mosque of the awzeqqr, it is built in a field that is given to the mosque.’

(105) wa leḥḇiḇ inu, mheššm-a zga-k
well dear of:1S be.embarrassed:PP:FS from-2MS
‘My dear, I am embarrassed.’

The following example shows the same stative usage of active and passive participles.

(106) ma kayen la g uṭar, la g ṭṭhar,
NEG EXST NEG in leg:EA NEG in back
‘There is nothing on the foot nor on the back nor in the belly. Everything
la g teeddist. kušši mferreṭ, kušši ḍayee
NEG in belly:EA everything be.depraved:PP:MS everything be.wasted:AP:MS
is depraved, everything is wasted.’

8.5. Summary
In the following table the uses of the aspectual forms are summarised. The Berber-morphology and Arabic-morphology Perfect(ive) and Imperfect(ive) (ka- + Imperfect for Arabic-morphology verbs) cover the same meanings. The bare Aorist (Berber-morphology) and the bare Imperfect (Arabic-morphology) essentially cover the same meanings as well. Furthermore, the active and the passive participle have been integrated into the aspectual system of Ghomara Berber.

<table>
<thead>
<tr>
<th>Berber-morphology</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>bare Aorist</td>
<td>consecutive event</td>
</tr>
<tr>
<td>particle + Aorist</td>
<td>non-real</td>
</tr>
<tr>
<td>Perfective</td>
<td>dynamic / resultative</td>
</tr>
<tr>
<td>Imperfective</td>
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<tr>
<td>Arabic-morphology</td>
<td></td>
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<td>---------------------------</td>
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<tr>
<td>Perfect</td>
<td>dynamic / resultative</td>
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<tr>
<td>ka- + Imperfect</td>
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<tr>
<td>(particle +) Imperfect</td>
<td>potential, future, wishes and injunctions</td>
</tr>
<tr>
<td>active participle</td>
<td>progressive (only some verbs), prospective, stative</td>
</tr>
<tr>
<td>stative</td>
<td></td>
</tr>
<tr>
<td>passive participle</td>
<td>stative</td>
</tr>
</tbody>
</table>
9. The verb ll ‘to be’

The verb ll ‘to be’ has some specific syntactic characteristics (cf. III. 7.5.1. morphology). The Perfective form of the verb follows the element aḡ ~ aḵ to form the past marker. In relative clauses derived from a non-verbal predicate or a negative verbal predicate ll is obligatory and follows the relative marker a (cf. IV.7.2.2. on focalisation of non-verbal constructions). The relative form of the Perfective is yellan or lla. The Imperfective can only be used in its habitual meaning while the Aorist appears in non-real contexts and after mḵi ‘if’.

9.1. The past marker aḡ ~ aḵ + ll

To refer explicitly to the past, the element aḡ ~ aḵ followed by a Perfective form of ll is put before the predicate. The conjugated verb ll agrees with the subject. The allomorph aḵ only appears before the conjugational prefix t- (2S, 3FS, 2PL). Before other verbal prefixes both aḡ and aḵ occur, although the former is much more frequent. The past marker can accompany any type of predicate, be it verbal or non-verbal. It places the event in the past, or, if the event is already in the past, it expresses a pluperfect. In combination with a + Aorist it refers to an anterior non-realised event. If it is not followed by a predicate it can be translated as ‘there was’. Some examples of its use are:

(1) aḵ i-ll ya wrgaz i ya tmeṭṭuṭ ma yer-sen
    PST 3MS-be:P one:M man:EA and one:F woman:EA NEG at-3PL
    ši n leḥšam
    NEG of children
‘There were a man and a woman who had no children.’

(2) tamoṭṭuṭ aḵ te-ll h-tett ibzaġen
    woman:EL PST 3FS-be:P 3FS-eat:I beans
‘A woman used to eat beans.’

(3) sspanyuḷ aḡ i-ll yr-es leflus nn-es
    Spaniards PST 3MS-be:P at-3S money of:3S
‘The Spaniards used to have their own money.’

(4) nuκna aḡ ne-ll mašy-in dayr-eḵ
    we PST 1PL-be:P go:AP-PL at-2MS
‘We were coming to you.’

Example (5) shows the pluperfect interpretation when a Perfective verb follows the past marker.
Example (6) shows the use of the anterior non-real.

9.2. Relative clauses

The use of \( \text{ll} \) is obligatory in relative clauses based on non-verbal predicates (including participles). Before verbal predicates it is optional. Its use seems to add the meaning of general relevance to the situation. In subject relative clauses the relative form of \( \text{ll} \) can be used. The full relative form is only used by old people, younger people prefer to use an abbreviation, \( \text{lla} \). Example (7) and (8) show a non-subject relative. In (9) an adverbial predicate is in the interrogative clause. In (10) a prepositional predicate is in the relative clause. In (11) an adjectival predicate is used.

(7) \( \text{nešt } n \text{ muḥemmed } a \text{ ye-ll } \text{ hmeḍ} \)
    as.big.as of Mohamed REL 3MS-be:P Ahmed
    ‘Ahmed is as big as Mohamed.’

(8) \( \text{imal} \text{hen } a \text{ ne-ll } \text{ wakl-in mezyan-in} \)
    fish REL 1PL-be:P eat:PL-PL good-PL
    ‘The fish we have eaten are nice.’

(9) \( \text{škun } a \text{ ye-lla-n } \text{ daxel?} \)
    who REL RF-be:P-RF inside
    ‘Who is inside?’

(10) \( \text{t-an } a \text{ lla } g \text{ lbir} \)
    F-REL:S REL be:P in well
    ‘The one who is in the well.’

(11) \( \text{iṣyaren } = \text{ihen } a \text{ lla } \text{ xuḍer } ma \text{ mezyan-in } \text{ ši} \)
    sticks=PL:ANP REL be:P green:PL NEG good-PL NEG
    ‘Sticks that are green (i.e. wet) are not good.’
After conjunctions the use of *lla* is optional, for example:

(12) *amk a lla yr-es sèba n lehšam*
    when REL be:P at-3S seven of children
    ‘When she had seven children.’

In the following text excerpt, example (13), the first verb is in the subject relative form while the second verb is preceded by *lla*. Example (14) shows a non-subject relative. In such a case the verb has the normal conjugation.

(13) *zeema t-a ye-nwa-n i netta, i tburgayezt,*
    so.to.say F-PRH:S RF-be.cooked:P-RF for he and unripe:EA F-
    t-a lla ma he-nwa ši
    PRH:S be:P NEG 3FS-be.cooked:P NEG
    ‘So to say the ripe one for him, and the unripe one, the one that is not ripe…’

(14) *u x uy a lla-x hadr-ax*
    and on INDEF:EA REL be:P-1S be.present:P-1S
    ‘And it is this which I had witnessed.’

After the negative element *ma* sometimes the Perfective form of *lla* is used. It is not entirely clear whether there is a difference in meaning with *maši*, compare the (lack of) contrast between (15) and (16).

(15) *lla, t-ha ma he-ll taceyyalt inu*
    no F-PRX:SNEG 3FS-be:P girl:EL of-1S
    No, this is not my daughter’

(16) *t-ha maši yemma*
    F-PRX:SNEG mother
    ‘He says to them: ‘this is not my mother.’

9.3. The Imperfective

The Imperfective of *lla* can only be used to indicate the habitual, for example:

(17) *awellu = ahen a sidi i-tstill mabayen, mabayen leart i leart,*
    plough =S:PRX VOC Sir 3MS-be:I between between ox and ox
    i-tstill g wammass
3MS-be:I in middle:EA

‘That plough is between an ox and an ox, it is in the middle.’

9.4. A + Aorist

The Aorist form of Il ‘to be’ is required for non-verbal predicates which have non-real a, for example:

(18) i muḥemmeḏ iptḍewwar netta i tmeṭṭuṯ, netta i
and Mohamed 3MS-go.round:I he and wife:EA he and
leḥšam nn-es gum nn-eḵ, gum nn-eḵ, baqi š a Il
children of-3S in.front of-2MS in.front of-2MS still FUT AD [3MS]-be:A
mxebbec?
hide:PP:MS

‘And Mohammed and his wife walk around, he and his children in front of you, in front of you, will he still be hidden?’

The construction a + Il ‘to be’ can be used before a Perfective verb to express an anterior non-real. Other aspectual forms cannot appear in this position.

(19) š a Il i-dda = d
FUT AD [3MS]-be:A 3MS-come:P = DC

‘He will have come’

The following is an example of the Imperative (which is the Aorist form):

(20) Il argaz
be man:EL

‘Be a man!’

The use of the Aorist after mḵi ‘if’ is optional. An example is:

(21) mḵi te-lli-t qriḥ da lmerṣa, š a k = i-bb ḫettar lbarku
if 2S-be:A-2S close to port FUT AD 2MS:DO-take:A until ship

‘If you are close to the port, he will take you to the ship.’

9.5. Negation of Il ‘to be’

The verb Il ‘to be’ is negated as other verbs (cf. IV.3.4.). Some examples are:

(22) ma aḡ i-Il ši lkar
NEG  PST  3MS-be:P  NEG  bus
‘There was no bus.’

(23)  taæyyalt = ahen  ma  ar  a  ll  ši  ylii-t-a
girl:EL =S:PRX  NEG  FUT  AD  [3SF-]be:A  NEG  fat-FS
‘That girl will not be fat.’

(24)  t-an  a  ma  lla  ši  g  lbir
F-REL:S  REL  NEG  be:P  NEG  in  well
‘The one (F.) who is not in the well.’
Appendix I Texts

Text 1 tān tyaṭṭ / Story about the goat

There used to be a goat in a forest. She had three children.

Then when she goes to the door she says to them: ‘O my children, o my children open my doors, food is on my back, water is in my mouth, and sprout on my horns, water is in my mouth, the sprouts are on my horns, water is in my mouth,

The they open the door for her. She gives them everything and goes back. When she returns. They recognise her speech of again [3FS]-say:I=3PL:IO VOC children-1S,

They recognise her speech of again [3FS]-say:I=3PL:IO VOC children-1S,
by her formula. She goes back again and says to them: ‘O my children,

\[
a \textit{wlaḏ-i, feth-u = ni bihan-i, w tteeleq f ṭṭahry-i,}
\]

o my children, open my doors, food is on my back,

\[
w lma fi duqm-i, \ w lqih f qrun-i, \ w lehilb fi ṭra-y.’
\]

and water in mouth and sprout on horns and milk in udder.

water is in my mouth, the sprouts are on my horns, the milk is in my udders.’

\[
tatth-an = as taggurt. sace i-dda = d yan nnhar i-susem
\]

Then they open the door. Then one day a jackal came and listen

\[
fx-es aḡdi, i-refe = as lhedra = ya-hen a he-qqer kaml-a.
\]

on jackal 3MS-lift:3S:IO speech=S:ANP REL 3FS-say:I all-3FS

to her. He copied the whole formula she was saying.

\[
sace i-dda = d i-nna = asen lhedra = yahen a he-qqer
\]

Then he went and told the whole formula

\[
yemma nn-sen kaml-a. ayişd = ahen i-qqr = as: ‘t-had
\]

their mother was saying. The billy goat said: ‘This

\[
maşi yemma.’ timyanan = ihen qqer-n = as: ‘t-ha yemma.’
\]

is not our mother.’ The little goats said to him: ‘This is our mother.’

\[
ayişd = ahen i-kker i-xebbee i timyanan = ihen amk a
\]

The jackal went and hid and the little goats when

\[
feth-en taggurt i-dda ye-ʃš = ahen. i-ʃš = ahen iy
\]

they opened the door, he went and ate them. He ate them
uyižd = a-hen ye-eqel aḡdi = yahren. sae a te-dda…
billy.goat:EA = S-ENP 3MS-recognise:P billy.goat = S:ANP then 3FS-go
and the billy goat recognised the jackal. Then she went…

tayatt = ahen t-žer taggurt = ahen mehlul-a zeg lbued.
goat = S:ANP 3FS-see:P door:EL = S:ANP open:PP-FS from far
…the goat saw that the door was open from a distance.

anŋ a t = t-žer mehlul-a zeg lbued teenna ya
when REL 3FS:DO = 3FS-see:P open:PP-FS from far 3FS-say:P well
When she saw that the door was open she thought

i-šš = as = ten kamlin. sae a te-dda te-qqim
3MS-eat:P = 3S:IO = 3PL:DO all-PL then 3FS-go:P 3FS-sit:P
that he had eaten them all. Then, the goat

he-tru tayatt = ahen. i-dda dayr-es ayižd = ahen.
3FS-cry:I goat = S:ANP 3MS-go:P to-3S billy.goat = S:ANP
kept on crying. The billy goat went to her.

teenna = as tayatt = ahen: ‘ana lla-n ayeṯma-k?’ i-nna = as:
3FS-say:P = 3S:IO goat-S:ANP where be:P-3PL siblings 3MS-say:P = 3S:IO
The goat said to him: ‘Where are your siblings?’ He said:

‘i-šš = ahen aḡdi.’ teenna = as: ‘d a eeql-et
‘The jackal ate them.’ She said: ‘Will you recognise

aḡdi = yahren?’ i-nna = as: ‘d a y = eeql-ax’. sae a
jackal = S:ANP 3MS-say:P = 3S:IO CRT AD 3MS:DO = recognise:A-1S then
that jackal?’ He said: ‘I will recognise him.’ Then

tedda dar yan hadık n iḡdan. i-nna = as: ‘waytun?’
3FS-go:P to one:M thingy of jackals 3MS-say:P = 3S:IO which.one
she went to a thing of jackals.

i-nn = as: ‘ha haw!’ sae a te-dda day ṭraʔis nn-sen,
3MS-say:P = 3S:IO PRES 3S then 3FS-go:P to boss of-3PL
He said: ‘which one?’ He said: ‘That one.’ Then she went
muṛaqiḇ nn-sen. dda te-nna = as: ‘u-haḏ i-šš = ay

supervisor of-3PL [3FS]-go:P 3FS-say:P = 3S:IO M-S:PRX 3MS-eat:P = 1S:IO
to their leader, their supervisor. She went and said: ‘This one ate my

lehšam inu.’ saɛa i-nna = as: ‘ndhu ha layn
children my then 3MS-say:P = 3S:IO go:IMP:PL PRES whither
children.’ He said to her: ‘Go over there
dar umṛaḥ = ani, w-a y-yeṛ-en w-ayet i-šš
to open.place:EA = S:DST MS-PRH RC-beat:P-RC M-S:other 3MS-eat:P
to that open place, the one who beats the other

w-ayet,’ saɛa dda-n dar ya wmṛaḥ, saɛa, tayatt
M-S:other then go:P-3PL to one:M open.place:EA then goat
eats the other.’ They went to that open place,

yr-es isekkawen iy uḡdi ma yr-es šī.
at-3S horns and jackal:EA NEG at-3S NEG
the goat has horns and the jackal does not.

saɛa dda-n. i-deḡḡ zečma-k, uḡdi i-deḡḡ isekkawen n
then go:P-3PL 3MS-do:I kind.of-2MS jackal 3MS-do:I horns of
They went. He made, the jackal made horns out of

lyays. i-tkewwar šī n isekkawen ṭwil-in i-deḡḡ = ahen dha
clay. 3MS-twist:I some of horns long-PL 3MS-do:I = 3PL:DO here
clay. He twisted some long horns and tamped

i-rekkz = ahen. h-takk = as tayatt ‘piiī’. he-tfertāt = ahen netta i
3MS-tamp:I = 3PL:DO 3FS-give:I = 3S:IO goat:E ONM 3FS-crumble:I = 3PL:DO he and
them down here (on his head). The goat hit him ‘bam’. She crumbled him and

lyays nn-es. eawed i-qar = as: ‘aq a xalti lmeẓza a ্ĩ-ax isekkawen.’
clay of-3S again 3MS-say:I = 3S:IO wait VOC aunt goat AD do:A-1:horn
his clay (horns). Then he said again: ‘Wait aunt goat I will make horns.’

eawed i-thaḍak w-yet i-rekkz = a-hen eawed g ḏḏmay nn-es. eawed
again 3MS-thingy:I M-PL:other 3MS-place:I = 3PL:DO again in head of-3S again
He made other ones and put them again on his head.
He said again: ‘Come my uncle, come.’ She hit him again ‘bam’.

She killed him. Night fell. They saw a

light far away. She thought it was her brother, the goat.

They went towards the light and they found themselves

at a party of jackals. A party of

jackals. When she peeked like this, she found

that the jackals were having a party. They said to her: ‘Come in, aunty goat,

They wanted to

eat her. They were dancing and singing.

They were saying ‘Boom boom, we will start with the goat and leave the billy goat for the
a ne-ġ = aṭ dar ẓḍaw'. katemma tayaṭ š a
AD 1PL-leave:A = 3S:DO to light like goat FUT AD
morning. Meaning that they wanted

\[ t = n-ešš \quad amilla \quad i \quad uyižd \quad š \quad a \quad y = ne-žž \quad dar \]
3FS:DO = 1PL-eat:A now and billy.goat FUT AD 3MS:DO-leave:A to
to eat the goat immediately and the billy goat in the

\[ ššbeh. \quad te-nna = asen: \quad ‘ha \quad nekki \quad š \quad a \quad ffy-ax \quad s \]
morning 3FS-say:P = 3PL:DO PRES I FUT AD go.out:A-1S with
morning. She said: ‘I will go out.’

\[ źḏmây \quad i̥nu.’ \quad saça \quad te-dda \quad t-ḥerrh = as \quad i \quad kmma-s. \quad i \quad kmma-s \]
head my then 3FS-go:P 3FS-call:P = 3S:IO to brother-3S and brother-3S
She went and called her brother. Her brother

\[ yr-es \quad ssluqiyyat, \quad yr-es \quad ssluqiyyat. \quad saça \quad amk \quad a \quad i-dda \quad i-tleq \]
at-3S greyhounds at-3S greyhounds then when REL 3MS-go:P 3MS-release:P
had greyhounds. So he went and released

\[ i \quad ssluqiyyat = ihen. \quad i-nna = as: \quad ‘kšem \quad bb = d \]
to greyhounds = PL:ANP 3MS-say:P = 3S:DO enter:IMP take:IMP = DC
those greyhounds. He said to her: ‘Go in and bring

\[ aṣeyyal \quad nn-em \quad zyer-sen. \quad te-ḥšem, \quad te-bb = d \quad aṣeyyal \quad nn-es. \]
boy:EL of-2FS from-3PL 3FS-enter:P 3FS-take:P = DCboy of-3S
me your boy. She went in and brought her boy.

\[ saça \quad ye-nn = asen, \quad ssluqiyyat = ihen \quad te-nn = asen: \quad ‘waḥit, waḥit, waḥit.’ \]
then 3MS-say:P = 3PL:IO greyhounds = PL:ANP 3FS-say:P = 3PL:IO one one one
Then he said those greyhounds, she said: ‘One, one, one.’

\[ saça \quad šebbr-en \quad ḏidan = ihen, \quad qqim-en \quad tett-an \quad ga-sen. \quad w-a \quad lla \]
then grab:P = 3PL jackals:PL:ANP stay:P = 3PL eat:I-3PL in-3PL MS-PRH be:P
They grabbed the jackals and ate them. The greyhounds could not reach the
ma yr-es ši n tẓenniṭ, ma lekkm-en = t ši
NEG at-3S NEG of tail:EA NEG reach:1-3PL = 3MS:DO NEG
the ones who did not have tails.

ssluqiyyaṯ = ihen. i w-a lla yr-es tẓenniṭ, šebbṛ-en = t
greyhounds = PL:ANP and MS-PRH be:P at-3S tail:EL grab:P-3PL = 3MS:DO
The ones who had tails, they grabbed

zeg tẓenniṭ = ahen zerdeen = d. saca i-qqr = as
from tail:EA = S:ANP overthrow = 3MS:DO:DC then 3MS-say:1 = 3S:IO
them from their tails and threw them on the ground. Then the jackal said

aḡdi i-qqr = as i umdakkul nn-es, i-qqr = as:
jackal:EL 3MS-say:1 = 3S:IO to friend:EA of-3S 3MS-say:1 = 3S:IO
to his friend, he said:

‘a byaṭ = leḵ a saḥbi, t-gert-et tẓenniṭ = ahen elabekri.’
o better = 2S:IO VOC friend 2S-cut-2S tail:EL = S:ANP early
‘You are lucky that you cut your tail before.’

iwa şafi, xelli-t = ha temma u źi-t fḥal-i.
well ready leave-1S:PF = 3FS:DO there and come-1S:PF way-1S.
That’s it. I left it there and came back.
Text 2 ssebta - Ceuta

Only from the fifties onwards, sixties, seventies, the Moroccans became numerous. The Moroccans came from here and there, all over the place, they mingled.

The Christians (Spaniards) started to be more strict in the borders. The riot police was in town. They apprehended people,

All outsiders. Because the ones who were there

They had a permit. One day the police caught us.
I outside:AP-PL in at ten o'clock, twelve o'clock. Were were out in cinema’s and in bars, outside, we used to hang out in the café’s. When we went home at night.

When we went home, to the ship.

we ran into the police. We ran into the police.

He would say to you: ‘Your papers, you, what are you doing at this time here?’ What are you doing? We would say: ‘Well,

He would say: ‘Your papers.’
You would give you papers, he looked at them and say goodbye. He would say: hé.

He would say ‘Straight to the ship.’ You would not stay,

if he saw you were drunk, falling by yourself.

He would say: ‘Hé, straight to the ship.’

or he would take you there himself. If you were close to the port,

he would take you to the ship.
Text 3 Description of living in Irāben

yer-nax axyam, axyam n lgayza, elaberra axyam
at-1PL house:EL house:EL of pole outside house:EL

We have a house, a wooden house. Outside of the house we live in, where we sleep

n ssuƙna, n nncaς, ayeffeτ yer-nex deryani, tett-an
of living of sleep cattle:EL at-1PL there eat:I-3PL
the cattle is over there, eating

alam = ahen, ne-takk = asen agles, n-ḥetš = asen ṛṛbiς g uxedmi.
hay, we give them plants we pluck grass and put it in a basket.

ne-ttáwy = ah = d ne-fk = asen = t tett-an = t.
nukna gals-in
We take it to them and give it to them to eat. We are sitting

i tyerυrt, ne-ssruŋ leafya, n-hemmu. i-till lehma fx-ennex
with fire.place 1PL:light:I fire 1PL:heat.up:I 3MS:be:I rain on-1PL
by the fire place, light the fire to heat up. It rains and

i tismeτ, i uɛebbiz nεn-es daryan gum n uḥemmal dar ṭaleς,
and cold and calf:EA of-3S there in.front of high.place:EA to higher
it’s cold. Its calf is over there next to the high place

i-hemmu ḥetta netta, tiyaṭṭen tett-an eawed g /ddaw,
3MS:heat.up:I also he goats eat:I-3PL again in light,
also heating up. The goats are eating by the light,

fhem-ti, /ddaw n leafya, i leafya ne-ssruŋ = at s
understand-2S:PF light of fire and fire 1PL:light:I = 3FS:DO with
you understand, the light of the fire. We light the fire with

isyaɾen, asyar n teẓga, asyar i-qqur, maʃi xder,
sticks stick:EL of wood:EA stick:EL 3MS:dry: P NEG green:MS
sticks, sticks from the woods. Dry sticks, not wet ones,
Wet sticks release smoke, and smoke, you understand, only smoke remains.

When it rains and when it is cold,

Those sticks become wet from the rain, they will not catch

When it rains we put the sticks there, we put.

Dry sticks there. Because for eight days the rain

keeps falling. Understand? Well, we light

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the fire, we heat up, and we make fried wheat.

We get wheat, put it in a frying pan,
and we fry it. Well, it is fried. Then we
grind it in a mill, a handmill,
like this, we grind it, we put a little bit of salt
in it so that the fried wheat is sweet and not insipid.
Well, and we grind it. We also bring corn, we grind it
in that handmill. When we grind it my mother makes
bread, corn bread. She makes corn porridge
and she makes bread from the corn. Well,

we continue eating.
Appendix II Wordlist

This wordlist is an alphabetic list of words gathered in the field for the purpose of this grammar. It is alphabetized by roots. Roots are an abstract representation of a word. Only the consonants of a word without the prefixes, the suffixes, the vowels and gemination are given. Spirantized consonants are written as stops in the list. Two words which have the same root but have different meanings are categorized separately. The singular and plural or collective and unity nouns are given, if there is a diminutive it is put after the noun. For Berber-morphology verbs the three aspectual stems are given in this order: Aorist / Perfective / Imperfective. For Arabic-morphology verbs the order is: Perfect / Imperfect (third person form). The transitivity of verbs is indicated between brackets. Causatives, passives, active and passive participles are given after the verb unless they are suppletive. Suppletive roots are referenced by ‘cf.’ or ‘see’. VN = Verbal noun. It is indicated whether the entry is B = Berber morphology, A = Arabic morphology, C = combination (e.g. Berber-morphology singular, Arabic-morphology plural), S = Spanish morphology or A/S = Arabic and Spanish morphology. The alphabetic order is:

b č d ē đ e f ğ ĥ k l m n p q r r s š t t w x y z ž ?

b

bb / bb / tawi ‘to take’ (trans) B
bb
baḥa ‘father’ B
bd
ibidu - ibiduwaṭ Dim. abdidu - ibdidwen ‘bucket’ C
bd
lebdu F. ibidaya ‘beginning’ A
bd
ḥdu / ḥda / ttaddu ‘to begin’ (trans) B VN lebdu
bdd
bdeq / bdeq / ttaddeq ‘to stand up, remain, cease’ (intr) B cf. wqf ‘to stand’
Caus. ssebdeq / ssebdeq / ssebdlaq ‘to let, make stand up’ (trans) B
bde
lebeqeq n uṭar - lebeqeq n uṭar ‘calf of the leg’ A
bdk
aheddîk - iheydak Dim. ahديدةk - iḥdidken ‘almost mature rooster’ B
bdl
beddel / beddel / tbeddel ‘to put on, trade, exchange’ (lab) B Pass tbeddel PP
mbeddel / mbeddla / mbeddlin
bdn
buḍen ‘long strings of cooked dough’ A
bdrmh
budribhem - budribhem ‘small bird’ A
bdyn
budiyun - budiyunis ‘grey wrasse’ S
bc
Pass ṭbaeqṭ ~ nbaceqṭ PP mebyąc / mebyąc / mebyaquin cf. znz
bebš
abebebuš - lebebebuš Dim. abebebeš - ibebešen F. tabeebušt Dim. tabeebešt - tibebešan ‘dung beetle’ C
bed
beeqeq / bbeeqeq / tbeeqeq ‘to go away’ (trans) B
bed
beeqeq / beeq eq-a / beeq eq-in ‘far’ A
<table>
<thead>
<tr>
<th>Word</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>bed</td>
<td>lbued ‘farness’ A</td>
</tr>
<tr>
<td>ber</td>
<td>beecear / beecear / tbeecear ‘to shit’ (intr) B VN tabeart</td>
</tr>
<tr>
<td>bes</td>
<td>aheeceiš - iheeceiš Dim. aheeceš F. tabeeceišt - tibeceešan ‘lamb’ B</td>
</tr>
<tr>
<td>bet</td>
<td>beeť ‘some’ E.g. beeť n medden ‘some people’ A</td>
</tr>
<tr>
<td>bf</td>
<td>lbuf - lbufať ‘intestine’ A</td>
</tr>
<tr>
<td>bya</td>
<td>bya / ibyi ‘to love’ (trans) A E.g. ka-ibyi-ha ‘He loves her.’</td>
</tr>
<tr>
<td>byd</td>
<td>byed / ibyped ‘to be jealous’ (intr) A PP mebyudż ~ mebyudz / mebyudża ~ mebyuđa / mebyudżin ~ mebyuđin</td>
</tr>
<tr>
<td>byl</td>
<td>buyel ‘locust’ A</td>
</tr>
<tr>
<td>byl</td>
<td>ibeyli ‘mortar’ A</td>
</tr>
<tr>
<td>bgr</td>
<td>lbugira - lbugiraţ ‘fishnet for catching bogue fish’ A</td>
</tr>
<tr>
<td>bhd</td>
<td>behdel / behdel / behdal ‘to humiliate’ (trans) B</td>
</tr>
<tr>
<td>bhm</td>
<td>lebhima - lebhayem ‘female mule’ A</td>
</tr>
<tr>
<td>bhw</td>
<td>abhaw ‘type of plant’ B</td>
</tr>
<tr>
<td>bhã</td>
<td>behţa - behţat ‘kiss’ A</td>
</tr>
<tr>
<td>bhr</td>
<td>abehţur - ibehţuren ‘big wave’ B</td>
</tr>
<tr>
<td>bhr</td>
<td>abelhr - ibelhryya F. tabelhrţ ‘fisherman’ C</td>
</tr>
<tr>
<td>bhr</td>
<td>lebhar - lebhura ~ lebhr ‘sea’ A</td>
</tr>
<tr>
<td>bhť</td>
<td>mbhët / imbhët ‘to astonished’ (intr) A Pass tebhët PP mebhuet / mebhûta / mebhûtin</td>
</tr>
<tr>
<td>bk</td>
<td>Caus bekki / bekka / tebekkay ‘to make cry’ (trans) B PP mbekki / mbekkya / mbekkin See tr for non-derived verb.</td>
</tr>
<tr>
<td>bk</td>
<td>bbuk / bbuk / tbakka ‘to explode’ (intr) B Caus ssbuk / ssbak / ssbëkka ‘to make explode’ (trans) B</td>
</tr>
<tr>
<td>bkk</td>
<td>abakhir - ibakhirën F. tabakhirţ - tibakhir ‘vagina’ B</td>
</tr>
<tr>
<td>bkr</td>
<td>bekri - bekriyyin F. bekriyya ‘early’ A</td>
</tr>
<tr>
<td>bkr</td>
<td>lbakur Unity F. tabakurt - tibakura Augm. abakur ‘early fig’ (These are the first figs in the tree, they are ripe in May/June.) C</td>
</tr>
<tr>
<td>bkr</td>
<td>bekker / bekker / tebekkar ‘to leave early’ (intr) B PP mbekker / mbekkra / mbekkrin</td>
</tr>
<tr>
<td>bkw</td>
<td>tabekkiwt - tibekkiwan ‘worm’ Augm. abekkiw B</td>
</tr>
<tr>
<td>bl</td>
<td>lbal ‘mind’ E.g. rri lbal nek ‘concentrate’ A</td>
</tr>
<tr>
<td>blbł</td>
<td>belbel / belbel / tbelbal ‘to have sex (animals)’ (lab) B PP mbelbel / mbelbla / mbelblin</td>
</tr>
<tr>
<td>blg</td>
<td>lbelg - leblag ‘lock’ A</td>
</tr>
<tr>
<td>ble</td>
<td>yah ibelea ‘many’ E.g. yah ibelea n temyaræn ‘many women’ A</td>
</tr>
<tr>
<td>bleš</td>
<td>abeleuç - ibeleuçen ‘kind of couscou’ B</td>
</tr>
<tr>
<td>blỹ</td>
<td>lbelya - leblayi ‘Moroccan leather shoe’ A</td>
</tr>
</tbody>
</table>
There are two types: aḇelluṭ n yalef which is bitter and aḇelluṭ n tasaft which is sweet.
swapped with the other.'

brk
  *lbaɾku* - *lebras* Dim. *lebrīku* → *lebrīkuwαt* ‘big ship’ A

brq
  *aḥerraq* - *iḥerraqen* ‘big eye’ B

brq
  *berreq / berreq / ṭherraq* ‘to stare’ (intr) B E.g. *iherreq gas* ‘He stared at him.’

brq
  *breq / iḥreq* ‘to shine’ (intr) A

brr
  *aḥerraɾ* - *iḥerraɾen* ‘rope to tie a bunch of wood on the back’ B

brr
  *aḥiraɾu* - *iḥerriwen* ‘grasshopper’ B

brr
  *aḥiraɾ* - *iḥer* ‘to stare’ (intr) B E.g. *iberreq gas* ‘He stared at him.’

brr
  *breq* - *aḥerraɾ* / *berreq / tṽerraq* ‘to shine’ (intr) A

brr
  *breq* - *aḥerraɾ* ‘rope to tie a bunch of wood on the back’ B

brr
  *breq* - *aḥerraɾ* ‘rope to tie a bunch of wood on the back’ B

brr
  *breq* - *aḥerraɾ* ‘rope to tie a bunch of wood on the back’ B

brq
  *aḥerraq / aḥerraq / ṭherraq* ‘to stare’ (intr) B E.g. *iherreq gas* ‘He stared at him.’

brr
  *aḥiraɾu* - *iḥerriwen* ‘grasshopper’ B
bṣṭ tabṣṣatt - tibṣṣatan Dim. tabṣṣayet - tibṣṣatan ‘mat’ B
bsnn ibusnan Unity F. tabusnant ‘type of fish’
bsyd abuṣeyyaḏ - ibuṣeyyaḏan F. tabuṣeyyyatt - tibuṣeyyyadan ‘type of snake’ B
bṣyḥ abuṣayḥa - ibuṣayhen ‘type of (venomous) spider’ B
bšr ibašar ‘people’ A
bšr lebšaṣra ‘reward (for finding something)’ A
bš lbašš ‘sail’ A
bšbl bušel Unity F. tabušbelt Augm. abušel ‘mushroom’ B
bškr abušakir - ibušakiren ‘white caterpillar’ (lives in dung) B
bt ibiṯ - lebyuṯ ‘room’ A
bttl abuṭlal - iḥuṭlalen ‘hump’ B
btlm biṭelma - biṭelmat ‘toilet’ A
btr lbaruṭiyya - lbaruṭiyyaṯ ‘battery of a phone’ A
btr lbaruṭiyya - lbaruṭiyyaṯ ‘battery (of a car)’ A
btrl lbaruṭul ‘petroleum’ A
btx lbaruṭix Augm. tabuṭixt - tibuṭixan Augm. aṭix ‘mellon’ C
bt lbaruṭa - lbaruṭaṯ ‘boot’ A
bt lbaruṭa - lbaruṭaṯ ‘butagas cylinder’ A
bt ṭu / ṭa / ṭaṭṭu ‘to share’ (lab/trans.) B (For older people this verb is labile, for young people it is transitive.) E.g. talqimt teṭṭa ‘The bread is divided.’
neṭṣa i baṣṭiyaṭna ‘We have divided it among each other.’
bṭḥ tabṣṭḥaḥt - tibṣṭḥaḥan ‘vertical wooden lock’ B
bṭl bateṭl ‘free’ A
bṭl ibaṭil - lebaṭil ‘boat’ This noun has feminine agreement, e.g. ibaṭil meẓẓiṯ ‘The small boat.’ A
bṭn ibuṭun ‘concrete’ A
bṭn tabṣṭṭant - tibṣṭṭantan ‘sheepskin’ B
bṭṭ lebṭṭa Unity F. tabṭṭaṭ - tibṭṭaṭan Augm. abṭṭaṭ ‘potato’ C
bṭy lbaruṭeyya - lbaruṭeyyaṯ ‘barrel’ A
bw abuṭaw - iḥuṭawen F. tabuṭawt - tibuṭawṭan ‘bean’ B
bwl tabuṭwal - tibuṭwalan ‘bladder’ B
bxl bxil / bxil-a / bxil-in ‘stingy’ A
bxms buxmse ‘type of fish (Mullus argentinae)’ A
bxn bexxannu F. tabexxannuṯ - tibexxannuṭan ‘type of plant’ B
byešry lbeyeṣṣeray - lbeyeṣṣeraysayin F. lbeyeṣṣerayya ‘merchant’ A
byṭ abeṭṭuṭ - iḥuṭṭuṭen Dim. ibuṭṭuṭ - iḥuṭṭuṭen F. tabeṭṭuṭ - tiḥuṭṭuṭan Dim. F. tabuṭṭuṭ - tiḥuṭṭuṭan ‘white one’ B
byṭ  
byṭ / beyet / tbeyyat ‘to whitewash’ (trans) B Pass tbeyyet PP mbeyyet / mbeyyta / mbeyytin

byṭ  
byet / beyt-a / buteyt ‘white’ Dim. bwibet / bwibt-a / bwibt-in ‘somewhat white’

byx  
lbyixa - lbyixat ‘old woman’ A

byx  
lbyixu - lebyixus ‘old man’ A/S

bz  
lbas - ibizan ‘hawk’ A

bzd  
bzeg / bzeq / tazzeq ‘to urinate’ (intr) B

bf  
bazzaf ‘many’ A

bkg  
ibzaqen ‘cooked beans’ B

bkg  
bzeq / bzeq / tazzeq ‘to swell, become wet’ (intr) B Caus. ssebzeq / ssebqeg / ssebzaq ‘to make wet’ (trans) B E.g. ilbzzeg as atebban ‘His trousers became wet.’

cf. fzg for Pass. and AP.

bgw  
abzw - ibzw Fin. tabziwt - tibziwan ‘piece of meat’ B

bgm  
lebzm - lebzyem Dim. lebezimet ‘buckle’ A

bzn  
lebzzuna - lebsazen Dim. lebzzuna - lebzzuna Augm. abezzun ‘human breast’ A

bzt  
lbZar ‘pepper’ A

byt  
bezhet / bezet / tbeyet ‘to mumble’ (Deaf people and young childrens talk) (intr) B VN tbeyet E.g. itbeyet, baqi ma itserrah lheedra ‘He mumbles, he still does not speak correctly.’

bq  
lebuzq Dim. lebzzeyeq ‘red seabream’

bzw  
abzw - ibzw ‘small bird, chicken’ B

č  
čkdr  
čikaqur ‘bottle part for pouring water out of the boat’ B

čkt  
čakita - čwaket ‘coat’ A

čmn  
čimineyaa - čimineyyat ‘chimney’ A

čp  
čappu - čappuwaq ‘hat’ A

čpy  
čapeyya - čapeyyat ‘squid’ A

črg  
čerreg / čerreg / tčerrag ‘to tear’ (lab) B Pass tčerrger PP mčerreg / mčerrga / mčerrgin

čry  
čaryu - čaryus Dim. čríyu ‘sparidæ / sea bream’ A/S

črqn  
čerqun - čraqen ‘dirt on the skin’ A

ččr  
čičar – čičaraq ‘green pea’

čwčw  
ačawčaw a ykeḥlin - ičawčawen a ykeḥlin ‘nightingale’ B

čwčw  
ačawčaw - ičawčawen ‘(small) bird’ B

d  
Imp. nda / ddu / dda / ttitu ~ titu ‘to walk’ (intr) B The Imperative is irregular. see mšy and mžy for AP.

ddđ  
deđđ / ideđđ ‘to oppose’ (trans) A


**ddbn**
*ddḥibena* F. *ddḥibena* ‘small fly’ A

**dbγ**
*debbye* / *debbe* / *tdebbay* ‘to weed’ (trans) B Pass *tdebbyet* PP *mdebbye* /
*mdebbya* / *mdebbyin* VN *tdebby B*

**dbḥ**
*ddḥibha* - *ddḥibḥa* ‘sacrifice’ A

**dbz**
*ddebzə* - *ddebzət* Augm. *adebbiz* ‘punch’ A

**dbz**
*lemdabža* - *lemdabžaṭ* ‘fight’ A

**dbz**
*debbe* / *debe* / *tdebbe* ‘to hit’ (trans) B

**dbz**
*tdabze* / *itdabze* ‘to fight’ (intr) A PP *mettadabze* / *metadabza* / *metadabzaṭ* E.g. *katydabze* i *baṭiyatem* ‘They fight each other.’

**ddg**
*adideg* - *idegün* ‘(wooden) pounder’ B

**dc**
*lmudače* - *lmudaçayin* ‘plaintiff’ A

**dfd**
*diḍi* - *diḍiṣ* ‘DVD’ S

**dfc**
*lemdeffye* - *lemdaffye* Dim. *lemdeffye* - *lemdeffyeṭ* ‘canon’ A

**dfc**
*dafe* / *dafeye* / *ddafeye* ‘to defend’ (intr) B E.g. *idafeye* *xfes* ‘He defended him.’

**dfc**
*dfc* / *dfe* / *ddfeye* ‘to push’ (trans) B Pass *nendedor* PP *medfuče* / *medfuçe* / *medfuçeṭ*

**dfl**
*adifel* ‘snow’ B

**dfl**
*taḍafalt* - *taṭafalt* ‘kind of ivy’ B

**dfn**
*lemdafna* - *lemdafṇaṭ* ‘fight’ A

**dfn**
*tdafen* / *itdafen* ‘to fight’ (intr) A PP *mettdafen* / *mettdafna* / *mettdafnin*

**dfr**
*ddfar* - *ddfarra* ‘back rope of a saddle’ A

**dfr**
*ddfarer* - *ddfarerče* ‘notebook’ A

**dy**
*ideye* - *ideyen* ‘heap of grain’ B

**dgdg**
*degeg* / *tdegeg* / *tdegaṭ* ‘to crush’ (trans) B

**dyš**
*adyešṣ* ‘colostrum’ B

**dhb**
*ddheb* - *ddhebban* Dim. *dheyyeḥ* ‘gold’ A

**dhq**
Pass *ndheqat* PP *medhuqa* / *medhuqaṭ* / *medhuqin* ‘to pound’

**dhš**
*ddheyeḥeṣ* - *ddhiṣaṭ* F. *ddhiṣa* ‘foal’ A

**dhš**
*deḥhes* / *deḥhes* / *tdeḥḥes* ‘to be crowded’ (trans) B Pass *tdeḥḥesat* PP *mdeḥḥes* / *mdeḥḥesiṭ*

**dk**
*taḍekt* ‘type of plant’ B

**dkl**
*amdakkel* - *imdakkel* ~ *imdakkelun* F. *tamdakkel* - *timdakkelan* ‘friend’ B

**dkr**
*ddikur* - *ddikuraṭ* ‘decoration’ A

**dkr**
*ddker* - *ddkereg* Dim. *ddkeyer* - *ddikṛaṭ* ‘male’ A

**dlg**
*dleği* / *dleği* / *ddleği* ‘to rub’ (trans) B PP *medluğ* / *medluğa* / *medluğaṭ* VN *ddluğ*

**dlḥ**
*ddellaḥ* Unity F. *tadellaḥ* - *tidellaḥan* Augm. *adellaḥ* ‘watermelon’ C

**dlm**
*ddlem* - *ddlima* F. *tadlemt* ‘type of tree’ C

**dls**
*adles* ‘plant - kind of’ B
dm  adem - iḍammen ‘blood’ B

dm  lōḍam ‘elephantiasis’ A

dm  liḍam ‘ransid butter’ A

dm  dam / idum ‘to last’ (intr) A

dml  demmala - ddnamel Dim. ddnimla - ddnimlaṭ ‘hump’ A

dmlž  ddemliž - ddmalež Dim. ddmilež ‘bracelet’ A

dmm  adnam - iḍnamen Unity F. taḍmam - tiḍmaman Dim. taḍmeyyemt ‘cherry’ B

dmn  adenna - ddmani Dim. ddmina ‘big field’ A

dmnḍ  admanḍa / idumḍa ‘to command or order’ (intr) A PP mdu mandỳa / mdumandiŋ

dn  aḍan - iḍannen (wa-) F. taḍant - tiḍanan (ta-) ‘intestines, guts’ B

dn  adin - lḍadyan ‘religion’ A

dn  lʔiḍen ‘permission’ A

dn  taḍunt - tiḍunan ‘fat’ B

dn  adden / idden ‘to call for prayer’ (trans) A

dn  ddeni / dgni / tdennay ‘to blow the fire’ (trans) B

dnfr  ddenfr - ddnafer ‘dolphin’ A

dny  ddenya ~ ddunya ‘world’ A

dr  tiḍert - tiḍran (ti-) ‘ear’ B

dr  dder / dder / tedder ‘to live, be alive’ (intr) B See ḥy for AP.

dr  ddr / ddr ~ ddr / ḏdray ‘to pass’ (intr) B

drb  aḍerrab - iḍerraḥen ‘small stone’ B

drbl  aḍrabel ‘clothes’ A

drdb  aḍerdiḥ - dderdeḥ ‘pounding (with feet)’ A

drdb  derdeḥ / derdeḥ / tderdeḥ ‘to stamp with feet, to be used’ (intr) B PP mderdeḥ / mderdeḥa / mderdeḥi VN aḍerdeḥi E.g. laṭṭa y ahen mderdeḥa ‘That bottle has been used.’

drc  adreec - ddrueca Dim. ddreyyee - ddrieq ‘arm’ A

drc  derreec / derreec / tderrae ‘to embrace’ (trans) B Pass tderreeq PP mderreec / mderreca / mderreca VN tderreka - tderreka E.g. ma nessen ūk a t iḍerreeq ‘We do not know who embraced her.’

drgl  dergel / dergel / tdergel ‘to roll’ (lab) B Pass tdergeł PP mdergel / mderglə / mderglı

drq  derreq / derreq / tderraq ‘to hide’ (trans) B PP mderreq / mderrqa / mderrqin

drs  addris - addrisat ‘address’ A

drs  VN ddras Augm. aderras ‘big wheat heap’

drč  drču - dručus ‘sea border between Morocco and Spain’ A
drwš  
ddriweš - ddraweš ~ ddriwšīn F. ddrīwša ‘poor person’ A

dry  
ddurriya - dureriyāt ‘descendants’ A

ds  
adas - iğasen ‘support beam’ B

dsk  
ddisku - ddiskus ‘song’ A/S

dšēr  
ddšēr - ddšūrā Dim. ddšeyyéř - ddširāq ‘village’ A

dw  
ddwa ‘medicine’ A

dwṛ  
taadewwar ‘small intestine of goats’ B

dwss  
dawses / dawsasa ‘to reveal, to blab’ (intr) B

dxšr  
dšexeř ‘village’ A

dxš  
taduxxeř ‘front rope of a saddle’ A

dx  
adxel ‘inside’ A

dxl  
aduxla ‘entrance’ A

dxl  
AP dxel / daxla / daxlin ‘to enter’ cf. kšm

dxn  
adxan / aduxxa / aduxxn ‘chimney’ B

dxn  
adxanen ‘smoke’ A

dyr  
ddayr ‘front rope of a saddle’ A

dz  
ddez / ddež / teddež ‘to pound (beans)’ (trans) B see dhq for Pass and PP

dzr  
adészar - ddésazer Dim. adžizzer - idžizzen F. tadezzar - tidužzaran Dim. tadezzert
- tidužzran ‘a striped red and white cloth which women wear around their middle’ B

ḍ  
ḍḍubb - ḍḍubbāq F. ḍḍubbā ‘bear’ A

db  
ḍḍubb-u / ḍḍubb-a / ḍḍubb-us / ḍḍubb-aṭ ‘fat’ A/S

dbb  
ḍḍḥaṣa ‘fog’ A

dbe  
ḍḍbaṣ ‘hyene’ A

dc  
dic / ḍec / ṭadxe ‘to loose’ (intr) B

def  
ḍeṣif / ḍeṣif-a / ḍeṣif-in ‘thin’ Dim. ḍeṣif / ḍeṣif-a / ḍeṣif-in ‘somewhat thin’ A

dfr  
ḍfer / ḍfer / ḍfer ‘to tie hair’ (trans) B Pass ḍeṣefref PP medfur / medfurta / meṣfurin B

dfṭr  
ḍḍeṣefar - ḍḍeṣeṭar Dim. ḍḍeṣether - ḍḍeṣeṭrat ‘work-book’ A

dyṛ  
ḍuṣri - ḍuṣrīyya-a - ḍuṣrīyy-in ‘simple, honest’ A

dḥ  
ḍeḥhi / ḍeḥha / ṭeḥḥa ‘to sacrifice’ (trans) B

dḥr  
ḍeḥer / ḍeḥer / ṭuṭuṛ ~ ṭuṭuṛ ‘to appear, seem’ (intr) B Caus. ḍeḥher / ḍeḥher / ṭeḥharr ‘to show, make appear’ (trans) B Pass ḍeḥḥaret PP mdeḥher / mdeḥhra / mdeḥhrin

dl  
ḍḍell - ḍḍellal Dim. ḍliwa / ḍliwlaṭ ‘shadow’ A

dmy  
ḍḍmay - ḍḍmaya Dim. ḍḍmayyey - leḏmiya ‘head’ A
<table>
<thead>
<tr>
<th>ᵃ</th>
<th>ᵃdr</th>
<th>ᵃdr <code>corn</code> There are two types: ᵃdr lḥemra <code>red corn</code> and ᵃdr turkiyya <code>Turkish corn</code> A</th>
</tr>
</thead>
<tbody>
<tr>
<td>ᵃdṛb</td>
<td>ᵃdḍraiba - ᵃdḍaraʔib ~ ᵃdḍaribat <code>tax</code> A</td>
<td></td>
</tr>
<tr>
<td>ᵃdṛb</td>
<td>Pass ndeṛet PP medṛuḇ / medṛuba / medṛuḇin E.g. argaz ahen haw dan medṛuḇ <code>That man is there, he has been hit.</code></td>
<td></td>
</tr>
<tr>
<td>ᵃdṛf</td>
<td>ᵃdḍrafaṭ <code>good</code> A</td>
<td></td>
</tr>
<tr>
<td>ᵃdṛṣ</td>
<td>ᵃlmeḍṛaṣa ~ ᵃlmeḍ̱ṛaṣa <code>school</code> A</td>
<td></td>
</tr>
<tr>
<td>ᵃdṣ</td>
<td>ᵃdeṣṣ / ᵃṭeṣṣ / tḍeṣṣa <code>to laugh</code> (intr) B E.g. iḍeṣṣ iḏes <code>He laughed together with him.</code> See ᵃṭḥk for Caus, Pass and PP.</td>
<td></td>
</tr>
<tr>
<td>³</td>
<td>ᵃtaduṭ</td>
<td>ᵃtaḍ̱uṭt <code>wool</code> B</td>
</tr>
<tr>
<td>ᵃdw</td>
<td>ᵃddaw / ᵃddiwan ~ ᵃddawati Dim. ᵃddwiwi - ᵃddwiwat <code>electricity, light</code> A</td>
<td></td>
</tr>
<tr>
<td>ᵃdwr</td>
<td>ᵃddawra - ᵃddawrat Dim. ᵃddwira - ᵃddwiraat <code>circle</code> A</td>
<td></td>
</tr>
<tr>
<td>ᵃdwr</td>
<td>ᵃdewwer / ᵃdewwer / ᵃtdewwar <code>to surround, turn around</code> (lab) B Pass ᵃtdewwrat PP medewwer / medewwra / medewwrin</td>
<td></td>
</tr>
<tr>
<td>ᵃdyf</td>
<td>ᵃddyayf - ᵃddyuf <code>guest</code> A</td>
<td></td>
</tr>
<tr>
<td>ᵃdyf</td>
<td>ᵃtdėyyaft - ᵃtideyyafan <code>present when visiting</code> B</td>
<td></td>
</tr>
<tr>
<td>ᵃdyf</td>
<td>ᵃdeyxef / ᵃdeyxef / ᵃtdėy&lt;yaf<code>to host</code> (trans) B Pass ᵃtdėy yeft PP ᵃmdeyxef / ᵃmdeyyfa / mdeyyfin</td>
<td></td>
</tr>
<tr>
<td>ᵃdyq</td>
<td>ᵃdeyyeq / ᵃdeyyeq / ᵃtdėyyaq <code>to narrow</code> (trans) B Pass ᵃtdėyyaqet PP ᵃmdeyyeq / mdeyyqa / mdeyyqin</td>
<td></td>
</tr>
<tr>
<td>ᵃdyɛ</td>
<td>ᵃdeyyeɛ / ᵃdeyyeɛ / ᵃtdėyyaf <code>to loose (tr.)</code> (trans) B</td>
<td></td>
</tr>
<tr>
<td>ᵃɛ</td>
<td>ᵃleebbad / ᵃleebbada <code>worshipper</code> A</td>
<td></td>
</tr>
<tr>
<td>ᵃɛbd</td>
<td>ᵃleebid / ᵃleebidat <code>slave</code> A</td>
<td></td>
</tr>
<tr>
<td>ᵃɛbd</td>
<td>ᵃebed / ᵃiebed <code>to worship</code> (trans) A</td>
<td></td>
</tr>
<tr>
<td>ᵃɛbř</td>
<td>ᵃeber / ᵃeber / ᵃeber <code>to measure</code> (trans) B Pass ᵃteberet PP meebur / meebruра / meebruин</td>
<td></td>
</tr>
<tr>
<td>ᵃɛbš</td>
<td>taɛebbist - taɛebbistan Dim. taebibet - tiebibat Augm. aεebbus - εεebbusten <code>navel</code> B</td>
<td></td>
</tr>
<tr>
<td>ᵃɛbz</td>
<td>aεebbiz / aεebbaz Dim. acibez - icibzen F. taebblest Dim. taebblest - tiebblezan <code>calf</code> B</td>
<td></td>
</tr>
<tr>
<td>ᵃɛbz</td>
<td>aεebbiz / aεebbaz <code>bull</code> F. taebblest - tiebblezian <code>cow</code> B</td>
<td></td>
</tr>
<tr>
<td>ᵃed</td>
<td>leaḍa / leaḍaṭ <code>custom</code> A</td>
<td></td>
</tr>
<tr>
<td>ᵃed</td>
<td>leaḍu / leaḍuwaṭ ~ leudyan F. leeqwuwa <code>enemy</code> A</td>
<td></td>
</tr>
<tr>
<td>ᵃedb</td>
<td>eeddeb / eeddeb / teeddah <code>to make suffer</code> (trans) B E.g. ᵃs a ᵃt ieddeb <code>He is going to make him suffer.</code> PP meeddeб / meeddба / meeddбин</td>
<td></td>
</tr>
<tr>
<td>ᵃedl</td>
<td>tieḍal <code>women</code> No SG. B</td>
<td></td>
</tr>
<tr>
<td>ᵃeds</td>
<td>taɛeddist - tieeddisan Augm. aεeddis - εεeddisen <code>belly</code> B</td>
<td></td>
</tr>
</tbody>
</table>
ɛeb  ləeəeb ‘slobber’ No SG. A  
ɛfr  eəer / eəer / əəar ‘to try’ (trans) B PP meəer / meəfra / meəfrin  
ɛfrt  leefrə - leefəɾəd ‘demon, clever person’ A  
ɛfy  leefa - leewa‘hell, fire’ A  
ɛfr  eəeəfɛr  / ɛafer  / ɨəafer  / tɛafəɾ ‘to try’ (trans) B PP meafəɾ / meəfrə / meəfrəɾ  
ɛegz  egez / iəgez ‘to be lazy’ (intr) A AP eəegzan / eegzana / eegzanın  
εκ  eəækɛɾ / eəeəkɛɾ / təekəɾ ‘to make brakish’ (trans) B Pass təekəɾ PP meəkɛɾ / meəkɛɾəɾ  
εκz  aəəcukkəz - iəcukkəza Dim. aəeəkikez - iəsəkikez F. təaəcukkəət / təiəcukkəzən Dim.  
el  eəeli / eəella / təelləy ‘to rise, to go up’ (lab) B E.g. ayil ahen iəella t ‘He ascended that mountain.’ Caus səeeli / səeela / səeəlay ‘to make ascend’ (trans) B Some people use the metathesized form səeeli.  
elf  ləelf ‘granules for animals’ A  
elf  eəəeeləf / eəelf / təeəella ‘to feed animals’ (trans) B Pass təeəelləf PP meəeləf / meəəlfə / meəelfina B  
elf  eəelf / elef / eəelf ‘to feed animals’ (trans) B PP meəeləf / meəəlfə / meəelfina  
elm  lealem - leulama ‘islamic scholar’ A  
elm  lemeəelləm - lemeəelləmin F. lemeəelləma ‘master’ A  
elm  lmeəeəelləm - lmeəeəelləmin F. lmeəeəelləma ‘assistant’ A  
elm  lməeəalləm - lməeəalləmin F. lməeəalləma - lməeəalləmat ‘teacher’ A  
elm  eəelman / eəeləm / teəeəlləm ‘to teach’ (trans) B  
elm  eəelem / iəelem ‘to warn, inform’ (trans) A  
elm  teəelem / iəeleem ‘to learn’ (intr) A  
elq  təameileqt - təimeilqan Dim. lemeilqa - lmeilqaɪ ‘spoon’ B  
elq  eəeləq / eəeləq / teəellaq ‘to hang up’ (trans) B Pass teəellaq PP meəeləq / meəeələq / meəeəlləqin E.g. ləaəəəəq y ahen teəellaq ‘That thing has been hung up.’  
elwn  leilwan - leilwaŋət ‘address’ A  
elv  eəeəelli / eəella / teəella ‘to go up’ (trans) B  
elz  lməəaləza ‘the healing’ A  
em  cam - snin ‘year’ A  
em  eəəəəmmi - eəəmmiəat ‘paternal uncle’ A  
em  eəum / eəam / təəxəm ‘to swim’ (intr) B There are two possible causatives  
em  eəum / eəam ~ xəum / ttxəum ‘to swim’ (intr) B The second causative is eəəem / eəem / txeəem / txeəeəm ‘to let, make swim’ (trans)  
em  eəam / eəam / təəxəum ‘to swim’ (intr) B There are two possible causatives  
em  eəum / eəam / təəxəum ‘to swim’ (intr) B There are two possible causatives  
em  eəum / eəam / təəxəum ‘to swim’ (intr) B There are two possible causatives  
em  eəum / eəam ‘to swim’ (intr) B The first one is Caus səəem / səəam / səəum ‘to let, make swim’ (trans)  
em  eəum / eəam ‘to swim’ (intr) B The second causative is eəəem / eəem / txeəem / txeəeəm ‘to let, make swim’ (trans) see ęwəm  
eml  leeməla - leeməula Dim. leeməyəyəl - leeməilaɪət ‘fishnet’ (only the net without lead, rope and other material) A  
eml  mul leuməla ‘the guilty one’ A
erem  / errem / treram ‘to pile up’ (trans) B PP meerem / meerma / meermin
erq  leeraq ‘sweat’ A
erq  eraq / iarq ‘to perspire’ (intr) A
erṭ  aearṭ - iearṭen ‘mortar’ B
erṭ  leart ‘invitation, bull’ A
erṭ  eareṭ / earṭ / teearṭ ‘to memorize’ (trans) B Pass teearṭ
erṭ  eerте / eerṭ / eerṭat ‘to walk in a certain way’ (intr) B
erṭ  taaratt - tiearattan ‘horizontal wooden lock’ B
erž  amee araž - imeeražen F. tameerašt - timeeražan ‘lame person’ B
erž  eerže / eerže / teerže ‘to limp’ (lab) B Pass teerže PP meerže / meerža / meeržin
ess  leessas - leessaša ‘guard’ A
ess  eess / iciss ‘to guard’ (intr) A E.g. netta atša a d eess das ‘Yesterday he guarded there.’
eš  leša - lešawat ‘dinner’ A
eš  leusuš - lewaš Dim. leeweyyeš ‘nest’ A
eš  eis / eas / tieis ‘to live’ (intr) B AP eayš / eayša / eayšin
ešb  eeššeb / eeššeb / teesšab ‘to prune’ (trans) B Pass teesšeb PP meesšeb / meesšba / meesšbin
ešr  lešir ‘juice’ (also: aman n tlečint ‘water of a an orange apple) A
esr  leesšra ‘pregnant one’ A
esr  eeššer / eeššer / teesšer ‘to beget’ (trans) B PP meeššra / meeššrin
esr  ešar / deesr ‘to be pregnant’ (intr) A eušra / eušer
ešš  ašuši - iwešas F. taešuši - tiwešaš ‘pen’ B
eskṛ  aeesκr - leesκr F. taeesκrīt ‘soldier’ B
etb  leaβa - leaqb Augm. aeqβun ‘sill’ A
etq  aezetuaq - iezetuqen F. taezetuq - titezetuqan Dim. tacziteqt - tičtiteqt ‘chicken’
et  Pass meeqat PP meeti / meeqyiy / meeqyiyin cf. fk
et  eet / eet / teet ‘to bite’ (trans) B
etl  eețtel / eețtel / teettal ‘to be late’ (lab) B Pass teettel PP meettel / meetšla / meetšlin
etl  teettel / iteettel ‘to be late’ (intr) A Pass teettel PP meettel / meetšla / meetšlin
does not give birth’ B
etq  eteq / iteq ‘to help, aid’ (trans) B Pass teeteq PP meetquq / meetqua / meetquqin
etr  leetur ‘chili pepper’ A
etref  etarref / itarref ‘to admit’ (intr) A PP meetarref / meetarfa / meetarfin
etš  eetšes / eetšes / teetšas ‘to make thirsty’ (trans) B
etš  etеш / ietеш ‘to be thirsty’ (intr) A eetšan / eetšana / eetšanin
etš  etеш / ietеш ‘to sneeze’ (intr) A
etš  leetša - leetšut Augm. aceetšut Dim. leetšita - leetšitaq ‘bite’ A
ewd  amcawed - imcawden F. tameawett - timeawtan ‘second goat in a year’ B
ewd  leawda - leawdaq ‘mare’ A
ewd  eawed / eawed / teawad ‘to tell’ (trans) B Pass teaawed PP meawed / meawda / meawdin
ewd  leawd - leewd ‘stallion’ F. leawda - leawdaq ‘mare’ A
ewm  eewwem / eewwen / teewwan ‘to let, make swim’ (trans) B Pass teewwmet PP meewwem / meewwma / meewwmin
ewn  amcawen - lemcawin F. tameawent ‘a help’ C
ewn  leewan ‘wind, a cold (disease)’ A
ewn  lmeeawana ‘help’ A
ewn  eawan / eawen / teawan ‘to help’ (trans) B E.g. š a y eawnax ‘I am going to help him.’
ewn  eewwen / eewwen / teewwan ‘to winnow’ (trans) B Pass teewwmet E.g. eewwen leflaḥa ‘He winnowed the crops.’
ewq  eewweq / eewweq / teewwaq ‘to howl’ (intr) B
ewr  leerwer - leiwar F. leawra ‘blind person’ A
ewr  ewer / ewer-a / eiwar ‘blind’ A
ewž  eewwež / eewwež / teewwaž ‘to bend’ (trans) B Pass teewwżet PP meewwež / meewwža / meewwžin
ewž  ewež / ewež-a / eiwež ‘crooked’ A
ey  eya / ieya ‘to be tired’ (intr) A AP eeyyan / eeyyana / eeyyanin
eyb  eeyyeb / eeyyeb / teeyyab ‘to criticize’ (trans) B PP mceeyyeb / mceeyya / meeyybin AP eayeb / eayba / eaybin
eyi  aceeyye - iweeyya ~ ieuyya ‘traditional singing’ B
eyi  eeyye, eeyye / teeyyae ‘to sing (traditionally)’ (intr) B
eyl  acceeyyal - leewawel Dim. asweyyel - iweeyyen ‘boy, son’ C
eyl  taceeyyalta - tieceyyalant Dim. taeweyyelt - tieywlan ‘girl, daughter’ B
eyn  amcayen ‘the fact of watching’ E.g. ttakkax as amcayen ‘I’m watching’ B
eyn  eayen / eayen / teayan ‘to look, to look for, to search, to research’ (trans) B E.g. eayen aṭ ‘He researched or checked something.’ E.g. eayen ma n yušan ‘Look at him what is wrong with him.’ eayen gas ‘He looked at him’. eayen fxes ‘He searched for him.’ eayen gas ‘He looked at him.’
eyr  eeyer / eeyer / teeyar ‘to play’ (intr) B VN lleeb - lleebat
ezl  ezel / ezel / ezul ‘to filter, separate’ (trans) B Pass neezlet PP meezul / meezula
mezuzlin VN leezla, leezlat E.g. neezzlet tayat ad zeg yayetma-s ‘This goat has been separated from its siblings.’

lezr leezri - leezara ‘bachelor’ A
lezza leeziza - leezizat ~ leezizawat ‘grandmother’ A
lezzi ‘older brother’ A
ez $\varepsilon zeb$ / ezeb / $\varepsilon$egb ‘to want’ (comes with the indirect object) (intr) B
ezin aezin - iezinen ‘dough’ B
lezna - leezani ‘soil for building houses’ A
lezun ‘cookie (drugs)’ (A mix of honey, hemp etc.) A
lezul ‘family’ A

af ~ uf / uf / taf ‘to find’ (trans) B cf. ẓbṛ for Pass and PP.

afur ‘free’ A
afud - ifadden ‘knee’ B
lfdda ‘silver’ A
lfddi / fedda / tfeddaw ‘to finish’ (trans) B PP mfeddl / mfeddya / mfeddin

tafdent - tifednan ‘toe’ B
fel feel / ifel ‘to rape’ (trans) A PP mefelul / mefeula / mefeulin

llefzet - llfuce Dim. llfica Augm. alefizin ‘snake’ A
afaff - ifaffen ‘nipple’ B
afuy - ifuyen ‘hump’ B

ffuq / ffey / teffey ‘to go out’ (intr) B AP cf. xṛž for AP and VN Caus ssufuq / ssafeq / ssufuq ‘to make go out’ (trans) B cf. xṛž for Pass. and PP

feg $\varepsilon$eg $\varepsilon$egge ‘to stretch’ (lab) B PP mfegef / mfeggea / mfeggein

fhem / ifhem ‘to understand, to boast’ (intr) A PP mfehum / mfehua / mfehumin E.g. ka-yfhem gas ‘He understands it very well.’ ka-yfhem fxi ‘He is showing off to me.’ Caus. fehemin / fehem / fehenu ‘to make understand, explain’ (trans) B Pass tfehem ‘mfefhem / mfehuma / mfehmin E.g. fehmin at spanyuleyya ‘Teach Spanish to him.’

lefhel - lefhuila Dim. afheyyl - ifheyyle ‘bull’ C
lefhem lefheym Unity F. tafhemy Dim. tafheyyemt ‘charcoal’ C

tauftuk - tafukan (ta-) ‘sun’ iğun taftukan ‘He has had enough of sun.’ B
fekk / ifukk ‘to rescue’ (trans) A Pass tfakk PP mfekuk / mfekuka / mfekükin

fk / fk / ttak ‘to give’ (trans) B cf. et for Pass and PP
fek $\varepsilon$ekra / ifekra ‘idea’ A
fek $\varepsilon$ek $\varepsilon$ekkar ‘to think, to make think’ (lab) B Pass tfekkrū PP mfekek / mfekka / mfekkin E.g. ifekk $\varepsilon$et ‘He reminded him.’ E.g. ifekker gas
‘He thought of him.’ E.g. *nya idda dar ssuq ifekkr̲ at, IBUT as d ssuṣra* ‘When he went to the market he thought of him, he brought the groceries for him.’

**fl**
-
*afel* ‘top’ B

**fl**
-
*lfil* ‘elephant’ A

**flḍ**
-
*lfalda* - *lfalad̤i* Dim. *lfalda* ‘dress’ A

**flfl**
-
*lfelf F.* *tafelfelt* - *tifelflan* ‘paprika’ C

**flḥ**
-
*leflaḥa* ‘crops’ A

**flḥ**
-
*lfellaha* ‘farmer’ A

**flḥ**
-
*felleḥ / fellḥ / tfellḥ* ‘to burst, to plough, to dispose of something without profit’ (lab) B PP *mfelleḥ / mfellḥa / mfellḥin* VN *ttfellḥa, ttfellḥat*

**flḥ**
-
*fleh / ifleh* ‘to cultivate’ (trans) A Pass *tfeleḥ*

**flm**
-
*lfilm* - *lfaʔlam* Dim. *leffeyem* ‘film’ A

**fln**
-
*tafelluntu* - *tiffellunana* Dim. *taifilestone* - *tifellhuna* ‘earthenware frying pan’ B

**flq**
-
*feleq / felleq / tfellq* ‘to cut up in two pieces’ (trans) B Pass *tfellqet* PP *mfellqa / mfellqaʔ* VN E.g. *tfellqet* *lgayza yahen* ‘The stick has been cut up in two pieces.’

**fls**
-
*afulus* - *ifulous* Dim. *aflilis* ‘cock, rooster’ B

**fls**
-
*leflus* - Dim. *leflisat* ‘money’ A

**fls**
-
*taflilest ~ taflilisat* - *tifellusana* ‘swallow’ B

**fls**
-
*tafulest ~ tfafulest ~ tafulust* - *tiflilsan* ‘chicken’ B

**flt**
-
*lfaṭa* - *lfaṭat* ‘fault’ A

**flt**
-
*faṭa / faṭa / tfalaṭay* ‘to make a mistake’ (intr) B

**flt**
-
*fleṭ / fleṭ / tfleṭ* ‘to escape’ (intr) B *felleṭ / felleṭ / tfellaṭ* ‘to make escape’ B PP *mfelleṭ / mfellṭa / mfellṭin*

**flṭw**
-
*tafaṭiwt / tfatṭiwan* ‘wart’ B

**flwḥ**
-
*aflawḥ* - *afalwaḥen* ‘branch of a cactus bush’ B

**fmly**
-
*famileyya* ‘family’ A

**fnd**
-
*lifundu* - *lifundus* ‘bottom’ A/S

**fnk**
-
*fanika* - *fanikaʔ* ‘pouting, pout whiting’ A

**fnṭṭ**
-
*aftenṭu* - *ifentat* F. *tafenṭu* ‘lip’ B

**fq**
-
*lefqi / liuqa* ‘imam’ A

**fq**
-
*fiq / faq / tfiq* ‘to wake up’ (intr) B AP *fayeq / fayqa / fayqin*

**fqy**
-
*lufuqya / lufuqyaʔ* ‘kind of djellaba’ A

**fr**
-
*affar* - *iffaren* ‘type of plant’ B

**fr**
-
*tafruṭ / tifferuan* ‘type of plant’ B

**frd**
-
*liftera* - *lifteraʔ* ‘pair’ A

**frd**
-
*liferda* - *leffrad̤a* Dim. *lefridi* - *lefridiyaʔ* ‘gun’ A

**frd**
-
*fred / fred / ffred* ‘to eat (animal)’ (trans) B
frg  aferaɣ - ifraɣen ‘fence’ B
frg  iferg Dim. lefrryeyeg ‘swarm (of birds)’ A
frɣ  ferrey / ferrey / tferray ‘to pour’ (trans) B Pass tferryet PP mferrey / mferrya / mferryin
frgl  tifergallan ‘type of plant’ B
frgnṭ  furgunita - furgunitat ‘van’ A
frkw  taferkiwt - tiferkiwṭan ‘small farmland’ B
frmż  ifurmaẓ ‘cheese’ A
frn  afermu - iferna ~ ifurna ‘big fire’ B
frnq  afernaq - ifernaqen Dim. afrineq F. tafernaqt ‘bulging on a stick’ B
frnz  frinsi ‘high hair’ A
frq  iferq ‘difference’ A
frqš  aferquaš - iferqaš ‘claw’ B
frr  tafrert ‘whey’ B
frš  lefraš ‘bed’ A
frs  Ifiras Unity F. tafirast - tifirasan ‘pear’ C
frsw  afersiw ‘type of plant’ B
frtt  aferaṭtiwt - iferattaṭwin ‘butterfly’ B
frrt  fertet / fertet / tferraṭ ‘to crumble’ (lab) B Pass tfertet PP mfertet / mferta / mfertṭin
frw  ifrawen ‘money’ B
frw  tafrawt Augm. aferaw - ifrawen ‘leaf’ B
frw  tafrwat - tifrrwṭ ‘wing, fin’ B
frx  aferux - iferxan Dim. afreyyex - ifreyyexen F. tafruxt - tifrerxatun Dim. tafreyyext - tifrirxatun ‘small chicken, boy, girl’ B
fŗe  free / free / fërree ‘to damage, hit painfully’ (trans) B Pass ttefre PP mefrrua / mefruecin
frř  ferrer / ferfer / tferrar ‘to clean, sort’ (trans) B Pass tferreret PP mferfer / mferfra / mferfrin
fřh  freh / freh / ffreh ‘to happy’ (intr) B AP ferhan / ferhana / ferhanin E.g. tefreh s rrigalul ‘She is happy with her gift.’ Caus ferreh / ferreh / tferrah ‘to make happy’ (trans) B Pass tferrḥet PP mferreh / mferrra / mferrrhin
fřkṭ  aferkut - iferkut F. taferkut ‘piglet’ B
frn  Ifern - lefraren Dim. afrilen - iffrilen ‘oven’ C
frq  frraq / frraq / frraq ‘to separate’ (lab) B Pass nferqet PP mefrraq / mefrua / mefr Raqin Caus. frraq / frraq / tferraq ‘to separate, to divide, to share’ (trans) B Pass tferrqet PP mferreq / mferrqa / mferrqin E.g. tferrqet ṣṣadaqa g zzenqa
‘The alms were given out in the street.’

\[
\begin{align*}
\text{fṛ} & \quad \text{fṛeš} / \text{fṛeš} / \text{fṛraš} \text{ ‘to spread out (a cloth for sleeping)’ (trans) B Pass} \\
\text{tf̣reṇeš} & \quad \text{mfṛeš} / \text{mfṛeša} / \text{mfṛešin} \\
\text{fṛešṭ} & \quad \text{ifṛeṣ̌a} - \text{ifṛeṣ̌ạt} \text{ ‘fork’ A} \\
\text{fṛ̣} & \quad \text{afreṣ} - \text{afreš} \text{ Dim.} \text{ Afṛeyyet - ifreṣτ} \text{ - tifrešτ} \text{ ‘pool’ B} \\
\text{fṛ̣} & \quad \text{fertṣ / fertṣ / tfertṣ} \text{ ‘to flounder’ (intr) B} \\
\text{fṛtxyl} & \quad \text{fartịxayl} \text{ ‘falcon’ A} \\
\text{fṛ̣} & \quad \text{afreṣ} - \text{afreš} \text{ Dim.} \text{ Afṛiṛež - ifṛizẹn} \text{ ‘kind of djellaba’ A} \\
\text{fs} & \quad \text{afus} - \text{afussen} \text{ Dim.} \text{ Afweyes} - \text{afweyes} \text{ is also a small plot of land. E.g.} \\
\text{fṣẹd} & \quad \text{afeṣẹd} \text{ ‘type of plant’ B} \\
\text{fṛ̣} & \quad \text{afreṣ} - \text{afreš} \text{ Dim.} \text{ Afṛịṛež - ifṛizẹn} \text{ ‘cock, rooster’ B} \\
\text{fṛ̣} & \quad \text{afreṣ} - \text{afreš} \text{ Dim.} \text{ Afṛịṛež - ifṛizẹn} \text{ ‘yolk’ B} \\
\text{fṛ̣} & \quad \text{afreṣ} - \text{afreš} \text{ Dim.} \text{ Afṛịṛež - ifṛizẹn} \text{ ‘bale’ B} \\
\text{fṣ̣} & \quad \text{afiṣ̣ẹd} \text{ ‘party’ A} \\
\text{fṣ̣} & \quad \text{afaṭ - ifatten} \text{ F. tafattiwt - tifattiwan ‘branch’ B} \\
\text{fṣ̣} & \quad \text{afụta - lefwet / lefweṭ} \text{ Dim. lefweta - lefwat} \text{ ‘towel’ A} \\
\text{fṣ̣} & \quad \text{tafattiwt - tifattiwan ‘bud out of which figs grow’ B} \\
\text{f̣̣} & \quad \text{afeṭīh - ifeṭīhen} \text{ Dim. atīteh - ifeṭīhen} \text{ F. tafettiht - tefeṭīhan Dim. taftīteh - tefeṭīhan ‘hole’ B} \\
\text{f̣̣} & \quad \text{tafuttiht - tefuttiht} \text{ ‘ass’ Augm. afuṭīh - ifuṭīhen B} \\
\text{f̣̣} & \quad \text{ftek / ftek / tatah ‘to open’ (lab) B Pass tfeṭešτ PP mfṛešτ / mfṛešta / mfṛeštin E.g.} \\
\text{f̣̣} & \quad \text{mfṛešτ} \text{ ‘the door is open.’ The PP also means ‘light’.} \\
\text{f̣̣} & \quad \text{taf̣tit - tef̣titan ‘fuse’ B} \\
\text{f̣̣} & \quad \text{ftek / ftek / tattel ‘to spin, to roll (couscous)’ (trans) B Pass tfeṭešτ PP mfṛešτ / mfṛešta / mfṛeštin E.g.} \\
\text{f̣̣} & \quad \text{mfṛešτ} \text{ ‘This bread is crumbled in the milk.’} \\
\end{align*}
\]
fṭn / fṭen ‘to become aware of’ (intr) A AP fṭen / faṭna / faṭnin PP mefṭun / mefṭuna / mefṭunin

fṭr / ifṭen ‘back side, ass’ B
taṭtirt - tifṭiran ‘bread without yeast’ B
afṭiṭ - ıfṭat ‘kind of teak’ B
faṭen / faṭna / faṭnin PP
mefṭun / mefṭuna / mefṭunin

fṭr / tafṭiṛt / tifṭiṛan ‘bread without yeast’ B
fṭṛ afṭiṛ 9 ifṭiṛen ‘back side, ass’ B
fṭṛ tafṭiṛt / tifṭiṛan ‘bread without yeast’ B

fṭṭ afṭiṭ 9 ifṭaṭ ‘kind of teak’ B
fṭṭ afṭiṭ 9 ifṭaṭ ‘kind of teak’ B
fwfw d / faw d / tfaw d ‘to be in the morning’ (intr) B The deictic clitic is obligatory. Caus. ssfav d / ssfav d / ssfav d ‘to make be in the morning’ (trans) B

fwd lefwad - lefwadat Unity F. tafewwat - tifewwadat ‘viscera’ C
fwḥfewweh / fefew̄eh / fefewах ‘to smell’ (intr) B VN lfiḥa E.g. lfiḥa mezyanah ‘A good smell.’

fwkřlfawakih ‘fruit’ A
fwfqlfewwaqa - lfewwaqat ‘hiccough’ A
fwrflew̄ar - lefw̄arat ‘steam’ A
fwrflew̄ira - lefw̄iraq ‘deep sea’ A
fxf lxewex / lxewexan ~ lxewux Dim. lxeweyex - lxeweyyax ‘trap for birds’ A
fxmx tfexxem / tfexxem ‘to boast’ (intr) A PP metfexxem / metfexxma / metfexxmin
fxřlfaxīr - lfexxara ‘potter’ A
fxřtafelxiařt / tifexxaran ‘treasure’ B
fxttafelxett / tifexxan ‘calf of the leg’ B
fyt afaqyet ‘moonless night’
fż afaqż - ifaqżen ‘edible part of douma leave’ B
fżgfAzeg - fażga / fażgat Pass tfaqżet PP mfażzag / mfażzga / mfażzgin see bżg
fżrzefżer ‘daybreak’ A
czttaťewżar - tifewżaran ‘big ant’ B
fżzafqaz – ifaqżazan ‘type of plant’ B

fżg / gż / değ ‘to do’ (trans) B
gblgabel / gabel / tgabel ‘to manage’ (trans) B
gd aģdı - iğdı F. tağdı ‘jackal’ B
gd cedad / gaded / tsgadan ‘to flatten’ (trans) B Pass tgaddeṯ PP mgaded / mgadda / mgaddin

gğf ağağuf - ağağufan ‘bush’ B
gf lgaffaţ ‘glasses’ A
ggtağiţet - tığiţan ~ iğiţen ‘tree’ B
ggwaţ leggaz ‘food (eaten with bread)’ A

gl ağağlu ~ awellu - iğelliwa ‘plough’ B
gl tığiţl ‘woods’ B
aḡel ~ uḡel ~ aḡul / uḡel / ttaḡel ‘to hang up food for animals’ (trans) B

ggull / ggall / tgalla ‘to swear’ (intr) B See ħlf for Pass and PP. E.g. iggall as ‘He swore to him.’ Caus sgull ~ sgall / sgull ~ isgall / sgall ‘to make swear’ (trans) B

gaglaf - iḡlafen ‘swarm of bees’ B

aglul - iḡ/lal F. taḡlult - tiḡ/lal ~ tiḡlulan ‘sea horn’ B

agulmam - iḡulmam F. taḡulmant ‘pool of rain water’ B

AP gales / galsa / galsin ‘to sit’ cf. qm for other causative sqim Caus. gelles / gelles / tgellas ‘to make sit’ (trans) B PP mgelles / mgellsa / mgellsin

agelzim - iḡelzam Dim. aḡizmen - iḡizmen F. taḡelzimt - tiḡelzam ‘pickaxe’ B

agwem / yuḡem / ‘to deserve more punishment’ (intr) B It is followed by an indirect object.

daḡem ~ daḡum ~ aḡem d ~ aḡum d / daḡem ~ yuḡem d / itdaḡam, ittaḡam d ‘to draw water’ (trans) B Pass tesqaṯ PP mdaḡem ~ mesqi / mdaḡma ~ mesqeyya / mdaḡmin ~ mesqeyyin See sqy for Pass and other PP. The d optionally follows itdaḡam e.g. daʔimen itdaḡam d ‘He always draws water.’, while it is obligatory in ittaḡam d. The PP can be formed on the basis of the Berber9morphology verb of Berber origin, e.g. aman ihen mdaḡmin ‘That water has been drawn.’

aḡemraw ~ aḡumraw - iḡemrawen ‘separation in a field’ B

gana ‘interest’ A

taḡant - tiḡanan ‘douma plant, bush’ B

genna ~ aḡenna ‘sky’ B

Legendil - legnadet ‘big rock’ Augm. agendallu A

Legins - legnusa ‘bad people’ A

aḡnaṭ - iḡnaṭen ‘edible soft white part of the root of the dwarf fan palm’ B

Igancu - Igancuwwat ~ Igancus ‘kind of rake’ A/S

Tagnawt - tiḡnawan Dim. taḡniweḵt Augm. aḡnaw ‘pumpkin’ B

Legnaza - legnazat ‘funeral’ A

Aḡer - iḡran (ya-) ‘farmland (medium size)’ B

Lqarru - Lqarris ~ Lqarrus ‘cigarette’ A/S

Lqirra - Lqirrat ‘war’ A

Taḡra - tğiɾwan ‘(hand-made) bowl’ B

Uḡer / uḡer / ttaḡer ‘to put bread in the oven’ (trans) B E.g. tuḡer aɣṛum ‘She put bread in the oven.’

Taggurt - tiḡura ~ tiggura ‘door’ E.g. taggurt n edḍmay - tiggura n ḍḍmay ‘temples’ B

Gurd-ū / gurd-a / gurd-us / gurd-at ‘fat’ A/S
grf  lgrifu - lgrifus ‘(water) tap’ A/S
grn  ag'ren - legrayen F. legrana ‘frog’ C
grr  legura - legrurat ‘bay’ A
grs  tağursa - tiğarsiwan ‘ploughshare’ B
grw  ağraw - iğrawen ‘group of people’ B
gryż  lgreyyaż - lgreyyażat ‘iron fence’ A
grż  agraz - igrażen F. tagrażt - tigrażan Dim. tagreyyezt ‘kind of cherry’ B
grż  gerrež / gerrež / tiğerraż ‘to cut hair’ (trans) B
grżm  tağerżumt - tiğerżuman ‘adams apple’ B
grδ  lgaraż - lgarażat ‘garage’ A
gsln  lgasulina - lgasulinaṯ ‘fuel’ A
gsr  agussar - igussaren F. tagussart - tigussaran Dim. tag”,sisert - tig”,sisran ‘descending hill’ B
gs  lgess ‘big floor’ A
gtr  lgatri - legtara ‘bed’ A
gtę  ağeřit - ighbor Dim. agęryeṣ - iğeryeten ‘bird’ B
gwd  gewweḏ / gewweḏ / tgewwaḏ ‘to lead, to guide’ (trans) B Pass ttgewweḏ PP
mgewweḏ / mgewwda / mgewwdin E.g. argaz ahen ttgewweḏ ‘That man has been guided.’
gwl  aguwwal - iguwwila Dim. agwiwel - igwiwlen ‘kind of fish’ B
gwz  gewwez / gewweż / tgewwaţ ‘to make pass’ (trans) B
gyř  tageyyaṭ (n waṭil) ‘vine’ B
gyř  lgayyṭa - lgayyṭat ‘cookie’ A
gyz  lgayza - legyuz Dim. legwiza - legwizat Augm. aqeyyz ‘stick, wood, pole’ A
gyz  tağayzuţ - tiğayzuţan ~ tiğuyaz Dim. tağweyyeṣ - tiğwizan ‘cow that has not given birth’ B
gz  amuggaz - imuggiza Dim. amgiger - imgigzen F. tamuggazt - timuggiza Dim. tamgigzezt ‘stick to hit/pin animals’ B
gz  lgessa ~ agezzuz ~ legzawez ‘pubic hair’ C
gz  gguz / ggez / teggez ‘to descend’ (intr) B It is possible to have a transitive reading with a locative direct object. Caus ssaguz / ssagez / ssagaz ‘to let, make descend’ (trans) B
gzb  lgessba - lgessbat Augm. agezzib ‘horn or trumpet’ A
gzr  legzira - legzirat ‘island’ A
gzr  lgessar - lgessara ‘butcher’ A
gzl  taḡzelt - tiḡezlan 'kidney (of goats and sheep)' B
gżdr  ageżdir - iżeżdren Dim. agżider - iğżidren 'big blue/green lizard' B
ğ  iğ
ğb  lḡben 'cheese' A
ğdd  lḡud 'ancestors' A
ğdrm  lḡaḍarmi - lḡaḍarmiyya 'government police' A
ğgt  lḡugetc F. tażužet - tižužtan 'walnut' A
ğed  lḡeđa Dim. lḡida 'carrot' A
ğh  lḡiha - lḡihat 'side' A
ğhd  lḡuhd 'strength' A
ğhdı  ğuhi / ğuhiyy-a / ğuhiyy-in 'strong' A
ğhh  āgehāghu - āğehāghuhen 'big fire' B
ğhl  lḡahel - lḡahlın F. lḡahlā 'infidel' A
ğhnım  lḡahennam 'hell' A
ğlb  ažellaḫ - lḡaleḫ F. tažellaḥt - tižellaḥa Dim. tažllıтеḥt - tižlillaḥ 'djellaba' B
ğld  lḡeld - lḡuld Dim. lḡleyyed Augm. ažellud 'skin' A
ğm  lḡim - ležyam Dim. lḡeyyem - lḡimat 'pocket' A
ğme  lḡuma 'friday' A
ğml  lḡmel - lḡmula Dim. lḡmeyyl - lḡmila Dim. lḡmeyyyla 'camel' A
ğn  lḡen - lḡnwen Dim. lḡniwen F. lḡneneyya Dim. lḡniwna - lḡniwnat 'spirits' A
ğn  lḡenna - lḡennat 'heaven' A
ğn  lḡun / lḡun / tžawan 'to be full (food)' (intr) B
ğnb  lḡumb - ležnaḥ 'side' A
ğrd  lḡarida - lḡaridaṭ 'newspaper' A
ğrdı  lḡarda - lḡardat 'yard' A
ğrm  lḡarima - lḡarimaṭ ~  międzədim 'crime' A
ğrr  ġerger / ġerger / tgergar 'to slide' (lab) B Pass nergency PP mergency /
mexterity / mexterity
ğw  ġewwi / ġewwa / tğewway 'to put the weed-pipe back in the leather bag' (trans) B PP mgetsu / mgetsuwy / mgetsuwin E.g. īğewwa ssebsi nnes 'He put his weed-pipe back in the bag.'
ğw  lḡaw ~ lḡaw 'weather' A
ğwb  lḡawaḥ 'answer' A
ğwf  lḡawf 'west' A
ğwhrs  lḡawhar Unity F. lḡawharə 'jewel' A
āyš ‘army’ A

łyb / łyb / tilyb ‘to vanish’ (intr) B

łyebir Dim. āybib F. tayebirt Dim. taybibert ‘small amount of powder’ B

łyebra ~ lyuha - leybara ‘dust’ A

łyber / łyber / łyber ‘to disappear’ (intr) B Caus łyebber / łyebber / telyebbar ‘to make disappear’ (trans) B Pass telyebret PP łyebber / myebbra / myebbrin

łyaweyya ~ leywahi ‘seagull’ A

łyawed (wa- ~ ya-) ‘ash’ B

łyeda - leydawaṭ ‘lunch’ A

lyuddani ~ ayeddat Dim. aydiden - iydiden ‘kind of black fig’ B

lyeddar - lyeddarin F. lyeddara ‘betrayer’ A

lyeder / iyeder ‘to betray’ (trans) A Pass nyedret PP myedur / meydura / meydurin E.g. nettaṭa nyedret ma ey ṭa ṭa, taseyyalt ahen ‘She has been betrayed, I do not know who betrayed her, that girl.’

lyadaḥ - lyadahaṭ ‘anger’ A

yeddeḥ / yeddeḥ / tyeddab ‘to make angry’ (trans) B AP yedban / yedhana / yedbanin PP myeddeḥ / myeddaba / myeddibin

aly ṭa (ya-) - iyallen F. tayilt - tayilṭan ~ tayilṭan ‘mountain/hill’ B

aly leyla ‘expensiveness’ A

aly / aly / yelli ‘to set, to descend, to be swallowed’ (intr) B Caus. sseyli / sseyli / sseylay ‘to swallow’ (trans) B

yelleh / yelleḥ / tyellab ‘to let, make win’ (trans) B AP yellaḥ / yellaḥa / yellaḥin PP myelleḥ / myellba / myellbin E.g. yelleḥ ay ṭakiss ‘Let me win from him.’

yllb yleḥ / yleḥ / yelleḥ ‘to defeat, to beat, to overcome’ (trans) B Pass tyeleḥ PP meyluḥa / meylūḥa / meylubin

yll ṣyelled / yelleḥ / tyellab ‘to thicken’ (trans) B

yldy yled / iyled ‘to be wrong’ (intr) A AP yaleḥ ~ yaleḥ / yalda ~ yalta / yaldin ~ yaltin

yll aylal - iy′lassen ‘sea snail’ B

yll aylel (i)-stalk’ B

yllini ‘calm sea’

yllq yleql / yleq / yluq ‘to cover, dark’ (trans) B Pass tyeleq PP meyluq / meyluqa / meyluqin

yllq leylaq - leylaqat ‘lid’ A
ylt\ ylt\ ~ \lyla\ ~ \lyla\ ~ \lyla\ ‘fault’ A
ylt\ ylit / ylit-a / ylit-in ‘fat’ Dim. yliet / yliet-a / yliet-in ‘somewhat fat’ A
ylw\ yla / yli ‘to boil’ (trans) A This verb is used interchangeably with the Berber-morphology verb sis ‘to boil’. E.g. ylaw aman ‘The water is boiled.’
ymr\ taymert ‘kind of rush’ B
ymr\ ayumri - iyumriyen ~ iyumra ‘corner’ The feminine is only used in taymert n ufus which means ‘elbow’ B
ymr\ ymur / ymur / tteymur ‘to grow (generic)’ (intr) B Caus. seymur / seymur / sseymur ‘to make/let grow’ (trans) B
yms\ yems / yems / qems ~ yemmes ~ yems ‘to cover’ (trans) B (Used by older generations. Young people use yeṭṭi) B
yn\ leyna - leynawi ‘song’ A
yn\ yenni / yenna / tyennay ‘to sing’ (trans) B Pass tyenna PP myenni / myennya / myennin E.g. ddya sek ihen tyennaw ‘Thos songs have been sung.’
ynn\ ayennan - iyunnan ‘stalk’ B
yns\ aseynes - iseynas ‘big needle’ B
yrbl\ Pass yjerbelt PP myerbel / myerbla / myerblin ‘to sieve’ cf. sf for ‘to sieve’ B
yrʾ\ lyaraḍ - lyaraḍaṭ ‘intention’ A
yrdm\ tayerdmet - tiyerdmman ‘scorpion’ B
yrmz\ tayrimetz - tiyermizan ‘baby head louse’ B
yṛng\ leyrang ‘type of fish (safillo)’ A
yṛs\ yres / yres / aqers ‘to slaughter’ (trans) B
γ\ ya ~ γar ‘only’ B
γγ\ tayeryart - tiyeryaran Dim. tayriyert - tiyriyran ‘fire place’ B
γb\ lyerbi Dim. leyribi ‘wind from the west’ A
γb\ lyerb Dim. leyribi ‘wind from the west’ A
γb\ lemyreb ‘evening prayer’ A
γdy\ ayerδay - iyerδayen F. tayerδayt - tiyerδayan ‘mouse’ B
γf\ ayerraf - iyerrifa Dim. ayirref - iyirifen ‘loam plate’ B
γf\ lyerraf - leyref Dim. leyref ‘cup’ A
γm\ ayrum ‘bread from the oven’ B
γq\ leyrqa - leyruga ‘bottom’ A
γq\ yreq / iyreq ‘to drown’ (intr) A AP yareq / yarqa / yarqin Caus. yeṛeq / yeṛeq / τyeṛeq ‘to drown, deepen’ (trans) B PP myyeṛeq / myyeṛqa / myyeṛqa ‘to cover’ (trans) B (Used by older generations. Young people use yeṭṭi) B
γs\ lyarṣet - leyrṣ ~ leyrṣ Dim. leyriṣa - leyriṣaṭ ‘vegetable garden’ A
γs\ lyers ‘plant’ A
γs\ tay”raṣt - tiy”raṣan ‘beehive’ B
γsy\ taysayt - tiysayan ‘gourd’ B
There exist many types of goats, some of the names used for them based on appearance are: ḥezzam = half white, half black qerqašuniyya = different colors, qelḏuniyya = two nipples in the neck, sebbeṣa = white forehead zerrugiyya = greyish, beyyuta = white ḥemra = red, qezzaweyya / qezzuga = greenish, merruṣa = hair to the side, long hair. Furthermore there are different age types based on the number of teeth the goats have:

- after one year ṭtniya = gets two new teeth
- after two years, ṭṭbaṣeyya = gets four new teeth
- after three years, lexmasiyya = gets five new teeth
- after four years, ṭṭdasiyya / żžemṭa = gets new teeth ẓ̇ţeṭta = goat that can not bare children.
- ṭayṭṭ mebṭula = the udder does not give milk
ɣz
ayez ‘fruit inside the dwarf fan palm’ B

ɣz
yəzzī / yəzza / tyeəzzay ‘to add punishment’ (intr) B e.g. yəzzu gas ‘Add punishment to him.’

ɣzd
tyəezdis - tiyəezdisan ‘rib’ Augm. ayyezdis - iyyezdas B

ɣzl
leyza - leyzaa ‘gazelle, nice lady’ A

ɣzl
tay “zalt - tiy “zalan Dim. tay “zeeyelt - tiy “zilan ‘bogue fish’ B

ɣẓẓ
eyezze / yezzez / tyeəzzaz ‘to chew’ (trans) B Pass tyeəzzət PP myezzez / myezza / myezzin

ɣẓd
ayiẓd - iyeḍden Dim. ayizyezz ‘i - iyzy yen ‘he - kid’ B

ɣẓdmyn
ayiẓdaman - iyizdenimyanen ‘billy goat that does not have a penis’ B

h

hbs
lḥebs - leḥbasat ‘prison’ A

hd
lhedda ‘threat’ A

hd
lihuḍl - lihuḍ F. lihuḍyya ‘jew’ A

hdd
heddeḍ / heddeḍ / theddad ‘to threaten’ (trans) B Pass theddət PP mheddeḍ / mheddeḍa / mheddeḍin VN ttehdiḍ E.g. aṭgim ihedd fxi ‘Yesterday he threatened me.’

hdm
heddem / heddem / theddam ‘to demolish’ (trans) B Pass theddem PP mheddem / mheddemα / mheddemβ

hdṛ
lḥeṛaṭ - leḥeṛaṭ ‘speech’ A

hğl
aḥeğal - leḥağal F. taheğalt - tiheğila ‘widow’ C

hğm
heğem / heğem / theğam ‘to let, make attack’ (trans) B PP mheğem / mheğma / mheğmin

hl
hala / ‘to come’ A This has only the Imperative form.

hlk
hleḵ / hleḵ / helleḵ ‘to sick, to be ill’ (trans) B PP mheluk ~ meedum / mehluka ~ meeduma / mehlukan ~ meedumin B

hlλ
lhilal ‘new moon’ A

hm
lhemm - lehemm ‘anxiety’ A

hm
hemmem / hemmem / themmam ‘to worry’ (trans) B AP mehmum / mehmuma / mehmumin

hmk
hemmək / hemmək / themmak ‘to hit’ (trans) B Pass themmkət PP mhemmək / mhemməkα / mhemməkβ VN ttehmik - ttehmikat

hrhṛ
lheṛaḥar - leḥraher ‘type of tree’ A

hrb
herreb / herreb / therreb ‘to make flee’ (trans) B cf. rwl ‘to flee’

hrw
buhrawa - buhrawaṭ ‘black bird’ (It dives into the water) A

hrw
lehrawa - lehrawaṭ Augm. ahraw ‘club, stick’ A

hrz
lmehraz - lemharez ‘mortar, insect that damages crops.’ A
hw  lehwa ‘rain’ A
hwd  lemhawdā ‘conversation’ A
hwd  tthawed / itthawed ‘to speak or talk’ (intr) A
hwl  hewwel / hewwel / thewwal ‘to make loud noise, disturb’ (trans) B Pass
thewwlet PP mhewwel / mhewwla / mhewwilin VN lhawl ‘loud noise,
disturbance’
hydr  tahaydurt - tihaydur[n ‘sheepskin’ B
hyš  lhayša n lebhar - lhayšat n lebhar ‘whale’ A
hz  hezz / hezz / thezza ‘to shake, move’ (lab) B Pass thezzet ~ nhezzet PP mehzuz
/mehzusa / mehzuza
hžm  lhužum ‘attack’ A
hžm  hžem / ihžem ‘to attack’ (intr) A E.g. hžem x tmeṭṭuṭ nnes ‘He attacked his wife.’
hžr  hažer / hažer / thažar ‘to migrate’ (intr) B
ḥ  ahu / ahu / - ‘to deserve more punishment’ (intr) B It is followed by the
preposition g ‘in’.
ḥb  lhebb ‘barley’ A
ḥb  taḥebbet - tiḥeba Dim. taḥbībet - tiḥbībta’n ‘granule, pimple’ B
ḥb  ḥibb / iḥibb ‘to love’ (trans) A
ḥbb  ḥibbi - ḥibbiwaṭ ‘maternal uncle’ A
ḥbl  buḥbel ‘life’ A
ḥblq  lheblqa ‘kind of white fig’ A
ḥbšbb  ḥebešbehb ‘freckles’ A
ḥbsw  ḥebsawłatw - ḥebsawwaṭ ‘little pimple’ A
ḥd  lḥedd - lḥudud ‘border’ A
ḥd  lḥedd ‘sunday’ A
ḥd  ḥadi / ḥada / thaḍa ‘to touch’ (trans) B PP mḥadi / mḥadya / mḥadin
ḥḍ  ḥḍi / ḥḍi / ḥeddī ~ ḥeddī ‘to keep an eye on’ (trans) B
ḥdd  lḥeddada - lḥudud ~ leḥaddaṭ ‘boundary’ A
ḥdd  leḥḍḍa Dim. leḥḍḍeyyed - leḥḍḍat F. leḥḍḍa - leḥḍḍayed ‘iron to cut woods
with.’ A
ḥdd  lḥeddāq - lḥeddāq F. taḥeddatt ~ taḥeddatt ‘blacksmith’ (The feminine
also refers to the job.) E.g. lemeellem n ṭeddatt ‘the blacksmith’ (Lit. ‘the
knower of blacksmithing’) A
ḥdd  ḥeddēd / ḥeddēd / ṭeddāq ‘to press’ (trans) B Pass nḥeddet ~ ṭeddet PP
mḥeddēd / mḥeddēd / mḥeddēdīn
ḥḍr  amḥaḍtri - lemḥaḍṭra ‘pupil’ C
ḥḍṛ  ḥḍṛ / ḥḍer / ḥeddeṛ ‘to attend’ (trans) B E.g. ihedṛ tameyra yahen ‘He attended that wedding.’

ḥğ  lḥaḡ - lḥuḡaɣ F. lḥaḡa ‘haji’ A

ḥğ  ḥhīq ‘pelgrimage to mekka’ A

ḥǧ  ḥǧaḥ - ḥḏuḥaɣaɣ Dim. ḥḏuḥaɣa ‘orphan’ C

ḥf  ḥfa / ihfa ‘to be blunt’ (intr) A Caus. heffı / heffıa / heffı ‘to make blunt’ (trans) B

ḥfr  ḥfraɣ - leḥwaɣer Augm. ahawfer ~ ahefrun ‘footprint’ A

ḥfr  ḥfeṛ ‘to memorize’ A AP

ḥf  ḥfarr - ḥfaɣaɣ Dim. ahfayyr - ihfayyaɣ F. tahfaɣaɣ Dim. tahfayeɣer - tahfaɣar ‘hole’ tahfaɣar n taytwaɣ - tahfaɣar n taytwaɣ ‘armpit’ lit. ‘hole of the shoulders’ B

ḥfr  ḥfer ‘to dig’ (trans) B Pass tteḥfeṛ B

ḥf  ḥfeṛ ‘to memorize’ A AP ḥfaɣaɣ / ḥfaɣa / ḥfaɣı ‘to make blunt’ (trans) B

ḥk  ḥhikka / ḥhikkaɣ ‘scratching disease’ A

ḥk  ḥhomm / ḥhäm / ḥham ‘to say, to tell’ (trans) A Pass teḥkem PP meḥkı / meḥkıyya / meḥkıyyin

ḥkm  ḥkem / ihkem ‘to adjudicate, to govern’ (intr) A Pass thekmet PP meḥkum / meḥkuma / meḥkumin

ḥkw  ḥkwaɣ ‘grey lizard without spots’ A

ḥl  ḥlu / ḥluw-a / ḥluw-in ‘sweet’ A

ḥlb đ  ḥelbul ‘person who circumcises’ B

ḥlm  ḥellama ‘type of fish’

ḥlw  ḥhelwa / ḥhelwat / ḥelawティ Dim. leliwa - leliwat ‘candy’ A

ḥm  ḥmaw - iheɣamen ‘person who circumcises’ B

ḥm  ḥmu / ḥma / hemmu ‘to heat’ (intr) B Caus sseḥmu / sseḥma / sseḥmaw ‘to make hot’ (trans) B

ḥml  aḥemmal - iḥemmila F. tahemmallt - tihemmila ‘high place in traditional houses’ B

ḥml  ḥemla / ḥemlaɣ ‘flood’ A
ḥml  ḥmel / deḥmel ‘to be pregnant, to flood’ (intr) A AP ḥamel / ḥamla / ḥamlin
ḥmm  aḥmam - iḥmanmen Dim. aḥmeyyem - iḥmiyyymen F. taḥmant - tiḥmaman Dim.
taḥmeyyemt - tiḥmiman ‘pigeon’ B
ḥmq  ḥemeq / ḥemmeq / tḥemmaq ‘to make mad, crazy’ (trans) B PP mḥemmeq / mḥemmqa / mḥemmgin
ḥmr  ḥmeq / ihmeq ‘to become crazy’ (intr) A AP ḥmaq / ḥamqa / ḥumeq
ḥmr  aḥmr aw - ḥmrwen Dim. aḥmrin - iḥmrin F. taḥmrwt - tiḥmrwan Dim. taḥmimert - tiḥmimran ‘red person/thing’ B
ḥmr  ḥmaw / iḥmr ‘to ask and answer in a game’ (intr) B
ḥmr  ḥmaw / iḥmr ‘to tan’ (intr) A
ḥmr  ḥmaw / ḥmaw-a / ḥumaw ‘red’ Dim. ḥmimaw / ḥmimaw-a / ḥmimaw-in ‘somewhat red’ A
ḥmr  tteḥmira ‘red pepper’ A
ḥṃṣ  ḥumṛis Unity F. taḥumṛis - tiḥumṛisan ‘chick pea’ C
ḥn  ḥinna ‘henna’ A
ḥn  ḥni / ḥni / ḥenni ‘to bend over’ (intr) B
ḥṉɡ̱r  mḥṉɡ̱er ‘type of disease’ A
ḥnk  ḥinka - ḥinša ‘chin’ A
ḥnn  ḥenni / ḥenna / tḥennay ‘to rub in henna’ (trans) B PP mḥenni / mḥennya / mḥennin
ḥnn  ḥnin / ḥnin-a / ḥnin-in ‘benevolent, mild’ A
ḥṉš  ḥṉši - leḥṉša Dim. leḥṉšyeš Dim. F. leḥṉša - leḥṉša ‘kind of snake’ A
ḥṉšš  tḥenšiš ‘fuss’ A
ḥnt  ḥntaw - leḥwanti F. leḥwnta - leḥwnta ‘shop, store’ A
ḥqq  ḥqaqqaye ‘truth’ A
ḥqq  ḥqeqeq - ḥqeqeq ‘right’ A
ḥqq  ḥeqeqeq / ḥeqeqeq / tḥeqeqeq ‘to check’ (trans) B Pass tḥeqeqeq PP mḥeqeqeq / mḥeqeqeq / mḥeqeqeq
ḥqq  ḥqiyya / ḥqiyya-a / ḥqiyya-in ‘real’ A
ḥrb  tahrabbayt ‘crushed barley with water’ (for children.) B
ḥrr  aḥrir - iḥrire ‘trouble’ B
ḥrr  leḥrir ‘silk’ C
ḥrr  tahrra - taḥrra Dim. F. taḥreyyert - taḥrra Augm. aḥrir ‘harira’ (The augmentative has thick meal and winter pumpkin. The diminutives contain very thin meal.) B
ḥrr  ḥruru / ḥruru / tteḥruru(t) ‘to crawl’ (intr) B
ḥry  ḥrureyya - ḥrureyyat ‘freedom’ A
ḥr  lḥara ‘land, place’ A

ḥrb  lḥarb - lḥarub ‘war’ A

ḥrb  ḥareb / ḥareb / ṭḥarab ‘to wage war’ (intr) B PP mḥareb / mḥarba / mḥarbin

ḥrb  ḥerreb / ḥerrebb / ṭerreb ‘to make war, fight against’ (trans) B Pass ṭerreb PP mḥerrebb / mḥerrebb / mḥerrebin

ḥrb  ṭhareb / ṭḥareb ‘to wage war’ (trans) A

ḥrbt  ḥerbet / ḥerbbet / ṭerbat ‘to slave away’ (lab) B Pass ṭerbat PP mḥerbat / mḥerba / mḥerbin

ḥrk  ḥerrekk / ḥerrekk / ṭerrekk ‘to stir or mix’ (trans) B Pass ṭerrekk PP mḥerrekk / mḥerrekk / mḥerrekin

ḥrk  ṭherrekk / ṭḥerrekk ‘to move’ (intr) A

ḥrm  ḥreem / ḥreem / ṭheram ‘to forbid’ (trans) B PP meḥrum / meḥruma / meḥrumin

ṣ a t ihreem zgak ‘He will forbid her from you.’

ḥrq  leḥraq ‘pain’ A

ḥrq  leḥriqq ‘burn mark’ A

ḥrq  ḥerq / ḥerq / ḥerq ‘to feel pain’ (intr) B VN tehriqq Caus. herreq / herreq / therreq ‘to hurt’ (trans) B

ḥrr  ḥerre / ḥerre / ṭerre ‘to liberate’ (trans) B Pass ṭerre PP mḥerre / mḥerra / mḥerrin E.g. iherr ahen ‘He liberated them.’

ḥṛš  lḥerṛašiyya - lḥerṛašiyyat ‘grouper (fish)’ A

ḥṛš  taḥerṛuṣṭ - tiḥerṛuṣan Dim. tahṛiṛešt - tiḥṛiṛšan ‘chestnut tree’ B

ḥṛš  ḥerreš / ḥerreš / ṭerṛaš ‘to roughen’ (trans) B

ḥṛš  ḥreš / ḥres / ḥešpa / ḥuṛeš ‘rough’ A

ḥṛt  lḥerṛaṭ - leḥriṛaṭ ‘kind of worm’ (It eats fruit and vegetables.) A

ḥṛt  Pass. tehṛaṭ PP meḥṛut / meḥṛuta / meḥṛutan ‘to plough’ cf. krz ‘to plough’

ḥṣ  ḥas / ḥis ‘to feel’ (intr) A AP hayas / hayasa / hayasin

ḥṣb  leḥṣab - leḥṣabat ‘bill, calculation’ A

ḥṣb  ḥsebb / ḥseb / ḥesseb ~ ḥṣub ‘to count’ (trans) B Pass ṭessb PP meḥṣub / meḥṣuba / meḥṣubin

ḥṣd  leḥṣed ‘jealousy’ A

ḥṣd  ḥṣed / ḥsed / ḥessed ‘to envy’ (trans) B AP ḥasda / ḥasda / ḥasdin E.g. uha ḥased uha ‘The one envied the other.’

ḥṣḥs  ḥṣhes / ḥṣhes / ḥtḥesas ‘to whisper’ (intr) B VN ṭhesis

ḥṣn  ḥessen / ḥessen / ṭhesan ‘to cut hair’ (trans) B

ḥss  ḥesassas - leḥsawes Dim. leḥswes - leḥswasat ‘the receiving partner in a homosexual relationship’ A

ḥss  tαḥessassat ‘homosexuality’ B

ḥṣd  leḥṣad ‘harvest’ A
**ḥṣd** Pass *teḥṣed* PP *mēḥṣud / meḥṣuda / meḥṣudin* ‘be ploughed’ B cf. *mgr* ‘to plough’

**ḥṣl** *ḥṣel / ḥṣel / ḥeṣsel* ‘to fall’ (intr.) E.g. *ša ḥṣel lehwâ* ‘Rain is going to fall.’ Caus. *seḥṣel / seḥṣel / sseḥṣel ~ itseḥṣal* ‘to drop’ (trans) B

**ḥṣl** *ḥṣel / ḥṣel* ‘to be trapped’ (intr) A *ḥṣel / ḥeṣsal / ḥeṣṣel* ‘to catch’ (trans) B Pass *thessleṯ PP mḥeṣṣel / mḥeṣṣla / mḥeṣṣlin*

**ḥṣr** *ḥeṣṣer / ḥeṣṣer / theṣṣar* ‘to have pity’ (trans) B *ḥeṣṣel / ḥeṣṣel / ḥeṣṣel* ‘to be trapped’ (intr) A *ḥeṣṣel / ḥeṣṣel / ḥeṣṣel* ‘to catch’ (trans) B Pass *theshreṯ PP mḥeṣṣer / mḥeṣṣra / mḥeṣṣrin*

**ḥṣr** *ḥṣer / ḥṣer* ‘to prevent’ (trans) A PP *mēḥṣur / meḥṣura / meḥṣurin*

**ḥšm** *lehšam - ihšišmen* ‘children’ C

**ḥšm** *lefšuma - lefšumaf* ‘shame’ A

**ḥšm** *hšem / ihšem* ‘to be ashamed’ (intr) A E.g. *uha hšem zeg uha* ‘This one is ashamed of this one.’ Caus. *heššem / theššam / thheššam* ‘to embarrass’ (trans) B Pass *theššmet PP mheššem / mheššma / mheššmin* E.g. *keği Ša yen theššmet* ‘You are going to embarrass us.’

**ḥšr** *ilhašara* ‘insect’ A


**ḥtš** *ḥteš / ḥteš / ḥetteš* ‘to mow, to collect bush’ (trans) B Pass *teḥteš PP meḥtuš / mehtuša / mehtušin VN lefteš*

**ḥčn** *aḥčun - ihčičen* Dim. *aḥčičen - ihčičišen - taḥčičen* Dim. *taḥčičent - tiḥčičan* ‘vagina’ B

**ḥtž** *ḥtaž / ḥtaž / tehtitž* ‘to want, to love’ (trans) B

**ḥtž** *ḥtaž / ihтаž / tehtitž* ‘to need, to want’ (trans) B PP *mehtaž / mehtaža / mehtažin*

**ḥw** *ḥewwi / ḥewwa / thewway* ‘to have sex (people)’ (trans) B Pass *thewwât PP mḥewwi / mḥewwya / mḥewwin*

**ḥwl** *ḥewwel / ḥewwel / thewwal* ‘to bend’ (trans) B Pass *thewwelṭ PP mḥewwel / mḥewwel / mḥewwla / mḥewwlin* B

**ḥwl** *ḥawel / ḥawel / thawal* ‘to try’ (trans) B

**ḥwl** *ḥwel / ḥwl-a / ḥiwel* ‘crooked’ A

**ḥwl** *lmuḥawala / lmuḥawalaṭ* ‘attempt’ A

**ḥwt** *lḥawṭ - lehwât* Dim. *ahweyyeṭ - ihweyyeṭen* ‘earth within vegetable garden’ C

**ḥwyž** *lehwayež Dim. lehwiaža - lehwiažat* ‘clothes’ A

**ḥwyym** *ḥewwayma - ḥewwaymat* ‘dragonfly’ A

**ḥy** *leḥya ‘shame’ A *

**ḥy** *lmaheyya ‘fermented drink made from dried figs’ A *

**ḥy** *AP hayy / hayya / ḥayyin* ‘be alive’ cf. *dr* ‘to live’

**ḥyk** *ahayek - ihuyak* ‘wool cloth’ B
kɣṭ - lekwaɣeṭ Dim. lekwyaɣeṭ ‘paper’ A
kḥl - akḥiḥel / ikḥiḥlen F. takeḥlawt - tikeḥlawan Dim. takhiḥlet - tikhiḥlan ‘black person/thing’ B
kḥl - keḥhel / keḥh - tkeḥh ‘to make darken’ (trans) B Pass tkeḥhlet PP mkeḥh / mkeḥhla / mkeḥhlin
kḥl - kḥel / ikhel ‘to tan, darken’ (intr) A
kk - tikkuk ‘type of bird’ A
kl - aḵal ‘soil’ Types of soil are: aḵal aḥemri is red soil, aḵal buɣriḇ is black soil, aḵal amliil resembles sand, aḵal milkeyya is good farmland. B
kl - akkil (wa-)’curdled milk’ B
kl - lmakla ‘food’ A
kl - aḵel / aḵul / uḵel / ttaḵel ‘to step on’ (intr) B
kl - tḵel / itḵel ‘to rely’ (trans) A E.g. kapytḵel fxes a s d ibb ssuxra inši ‘He relies on him to bring him some groceries.’
klm - lkkelma / leklam ‘word, speech’ A
klw - lkelwa ‘kidney’ A
km - kma / ayemta ‘brother’ B
km - lkama ‘bed’ A
km - lkumm ‘sleeve’ A
km - kemmes / kemmes / tkemmas ‘to pack’ (trans) B Pass tkmmesṭ PP mkemməes / mkemməla / mkemməlin
kmm - tak’mant - tikk’maman ‘muzzle’ B
kmr - aḵemmar - ikemmiṭa Dim. aḵmimere - ikmmiṭen F. takemmart - tikemməir Dim. takemmər - tikemməran ‘face’ B
kmš - aḵemmish / ikemmishen Dim. aḵmimish / ikemmišan F. takemmisṭ - tikemmišan Dim. takemmisṭ / tikemmišan ‘fistful’ B
kmš - kemmeš / kemmeš / tkemmesṭ ‘to fold’ (lab) B Pass tkemmisset PP mkemməes / mkemməša / mkemməsin VN tekmiša ‘a fold’
kms - kemmes / kemmes / tkemmas ‘to pack’ (trans) B Pass tkemmset PP mkemməes / mkemməsa / mkemməsin
kmṭ - kemmet / kemmet / kemmet ‘to burn’ (intr) B
kmṭ - ssekməet / ssekməet / ssəkməat ‘to burn’ (trans) B
kmy - lekmaya - lekmayat ‘smoking’ A
kmyn - Ikmynun - Ikmynunat ~ Ikmynunis ‘truck’ C
kmz - aḵmez - ikemzan ‘nail’ B
kn - takint - tikinan ‘big plate’ (The harvest is collected in it.) B
| kn  | taḵna (ta-) - taḵniwan (ta-) ‘co-wife’ B |
| knk | lkanki - leknaka Dim. lekniki - leknikeyyat ‘gas lamp’ A |
| kns | knes / knes / kknes ‘to fight, to argue’ (intr) B cf. šṛṛ for PP |
| kntr | lkarunru - lkarunrus ‘square’ A/S |
| knw | akenniw - ikenniwen F. taḵenniwt - tiḵenniwan ‘twins’ B |
| knz | lkinz - leknuz ‘treasure’ A |
| kpṭ | akpeṭ - ikep - lekpeṭ Dim. akpipt - ikpιpten ‘coat’ C |
| kr  | aḵur / yukuq / ttkaqt ‘to steal’ (trans) B See šṛṛ for Pass and PP. |
| kr  | kra / ikr ‘to hire’ (trans) A Pass tekra AP kari / karyq / karin PP mekri / mekriyyin |
| krbš | akarḇaš - lekarḇeš Dim. akrbaš - ikrbašen F. takarbašt - tikarbašan ‘claw’ C |
| krd | lekridi - lekridiyyat ‘debt’ A |
| krēf | aḵurfa ‘chaff’ B |
| krr | kerreš / kerreś / tkerraš ‘to remove skin of fish, make a hole’ (trans) B Pass tkerrseṯ PP mkerreš / mkerrša / mkerršin |
| krm | lekrima - lekrimaṭ ‘ointment’ A |
| krs | lkursi - lekrsa Dim. lekrisi - lekrisiyyat ‘chair’ A |
| krš | tekkerša / kerreš / tkerraš ‘to remove skin of fish, make a hole’ (trans) B Pass tkerršeṯ PP mkerreš / mkerrša / mkerršin |
| krtl | amkertel - imkertlen ‘big rock’ B |
| krčn | lkarčun - lkarčus ‘mattress’ A/S |
| kry | lkaryyya / lkarya ‘renter’ A |
| kry | lkreyya / lkreyyaṭ ‘small octopus’ A |
| krz | lkurzeyya / lkurzeyyaṯ ‘wool belt’ A |
| krż | lkarţera - lkarţeraṯ ‘men’s wallet’ A |
| kšt | kanaṭiṛu - kanaṭiṛus ‘type of fish’ S |
| kšt | lkaṛ - lkaṛan ‘intercity bus’ A |
| kšt | lkurqṣ - lekwaṛi ‘ball’ A |
| křf | lekrafez ‘celery’ A |
| křf | lkarahā - lkarahāṭ ‘hatred’ A |
| křh | krep / ikrēh ‘to hate’ (trans) A AP karēh / karha / karhin PP mekruh / mekr ha / mekrhin E.g. nekki karēh ddenya ‘I hate the world.’ |
kṛny  
<483> 
kṛṣ  

kṛṣ / lekṛṣa ~ lekṛṣa Augm. akeṛṣus ‘cart or wagon’ A

kṛṣ / lekṛṣa ~ lekṛṣa ‘type of ship’ (It has a net that scrapes the sea floor to catch fish.) A

kuṛuneyya  

kuṛuneyyaṯ  

’fragrant’ A

ktb  

ktb / kṭeb / kṭeb ~ kktuḇ ‘to write’ (trans) B Pass tketḥet ~ nketḥet PP mektuḇ ~ mektuḇa ~ mektuḇa / mektuḇin ~ mektuḇin

ktf  

ktf / iktašef ‘to guess’ (intr) A Pass tektašfet PP mektašef / mektašfa / mektašfin E.g. ktašef fxes ‘He guessed it.’
kčṛ lkučarr - lkučarrat ‘spoon’ A
kčy lkučeyya ~ lčukeyya - lkučeyyat ~ lčukkiyat ‘razor’ A
kwdr lkwaḏru - lkwaḏrus ‘door frame, window’ A/S
kwṛ akewwor - ikewwira F. takewwart - tikewwira Dim. takwiwṛt - tikwiwran ‘ball, circle’ B
kzw lkawwa ‘pride’ A
kzw kewwėz / kewwėz / tkewwėz ‘to boast, to duck’ (intr) B PP mkewwėz / mkewwėza / mkewwėzn
kyf tkeyyef / itkeyyef ‘to smoke’ (trans) A PP mkeyyef / mkeyyfa / mkeyyfin
kyl keyyel / keyyel / tkeyyel ‘to weigh’ (trans) B Pass tkeyyel PP mkeyyel / mkeyyela / mkeyylin E.g. tkeyyelat taferkwat ahen ‘The (fruits of the) plot of land has been weighed.’
kzn lkuzina - lkuzinat ‘cookhouse’ A
l
l alu / ulu / ttalu ‘to pick, pluck’ (trans) B
l il / il / till ‘to be’ (intr) B
l tala (ta-) - taliwan ‘spring’ B
l ul - leqluba ‘heart’ C
lbb lababu - lababus ‘sink’ S
lblb lleblab ‘type of plant’ A
lbq lebbq / lebbq / tlebbq ‘to become fat’ (lab) B PP mlebbq / mlebbqa / mlebbqin E.g. aṣeyyel nnes ilebbq ‘His child has become fat.’ ilebbqat ‘He has made him fat.’
lbč llbač ‘hot rain’ A
lbw llbewya ‘beans’ A
lbw Dim. llbewyet Dim.F. lbhita ‘great-grandchildren’ A
lbnt lbanṭi ‘eastern wind and waves in the sea’
lbż alabbaẓ ~ arabbaẓ - alabbaẓen ~ irabbaẓen Dim. alibbeẓ ‘bread chunk’ B
lbż lebbeẓ / lebbeẓ / tlebbeẓ ‘to form a bread chunk’ (trans) B
lbɛɛ lbeleucu - lbeleucat ‘big snail’ A
lf alef (ya-) - ilfan ‘boar’ B
lfṭ lleft Unity F. talefunt - tileftunan Augm. aleftun ‘sweet potato’ B
lfṭ talefitt - tileffita Dim. talfifeṭ - tilsfita ‘blisters’ B
ly lya - llyat ‘sound (from a distance)’ A
ly lluya - lluyat ‘language’ A
lhm llhem F. llehma Dim. llhima ‘flesh’ (The feminine refers to a tasty peace of meat.) A
lhs lḥes / lḥes / lḥes ‘to lick’ (trans) B
lk  tilket - tilkan ~ tirkan ‘head louse’ B
lkm  lkem ~ lkum / l kem / lekkem ‘to arrive’ (trans) B E.g.  ilekm  at ‘he reached it.’
Caus sselkem ~ sselkum / sselkem / sselkam ‘to make arrive’ (trans) B
lkm  tilkaman ~ tirkaman ‘kind of spinach’ B
lkptr  îlikupter ~ alikupter ‘helicopter’ A
lkš  likuš ‘pampers’ A
ll  alili ‘oleander (laurus nobilis)’ B
ll  lilil - llyali ‘night’ bellil Adv ‘at night’ A
ll  llilel - llulellyn F. lluleyya ‘first’ A
llf  talelluf ‘white earth’ (Used to be used to paint the house.) B
lm  alum (wa-) ‘hay’ B
lm  lam / ilum ‘to blame’ (intr) A E.g. lam fxi ‘He blamed me.’
lnmn  llimin ‘right ‘ E.g. afus n llimin ‘the right hand’ A
lnmny  alumunyu ‘aluminium’ A
lngd  lingwaḏu - lingwaḏus ‘tongue (fish)’ S
lngš  llingaš Unity F. talingašt - tilingašan ‘pear’ C
lps  lappis / lapes ‘pen’ A
lq  laqi / laqa / tlaqay ‘to let, make meet’ (trans) B
lq  tlaqa / tlaqa ‘to join, meet’ (trans) A
lqḥ  llqḥ ‘sprout’ A
lqḥ  llqḥ / leqqeḥ ‘to graft’ (intr) B PP melqaḥ / melquaḥ / melqaḥin
lqm  leq qem / leqqem / tleq qem ‘to cast’ (trans) B Pass tleq qem PP mleqqem / mleqqma / mleqqmin
lqm  luqma - luqmat ‘mould’ A
lqm  talqint - tilqiman ‘bread’ cf. xbz B
lqt  leqqeq / leqqeq / tleqqeq ‘to pick up’ (trans) B Pass tleqqeq PP mleqqeq / mleqqta / mleqqin
Ir  tellirt - telliran ‘type of plant’ B
Ir  illira - illiraḥ ‘ass’ A
Irṭ  llưṭi ‘sea has northern wind and waves’
Irḍ  llarḏa - llarḏat ‘school of fish at night’ A
ls  alus - ilusan F. tulust - tilustan ‘husband’s brother/sister’ C
ls  iles - ilsan ‘tongue’ (The plural is not accepted by everybody.) B
lsq  lseq / lseq / lesseq ‘to stick, to glue’ (intr) B Pass tlesseq PP mlesseq / mlessqa / mlessqin
ltm  lltam - llṭam Dim. llṭeyyem ‘veil to cover the face’ A
ltm  uleṯma - ayeṯma ‘sister’ (The plural refers to brothers as well as sisters.) B
lčn  lečin F. talčint - tilečinan ‘orange’ C
ltx \( t\text{tex} / \text{tex} / \text{lettex} \) ‘to fling, throw’ (trans) B Pass \( t\text{letxe}\theta \) PP meltux / meltuxa / meltuxin

lt \( \text{llaṭa} \text{- } \text{llaṭan} \) Dim. \( \text{llṭa} \text{- } \text{llṭat} \) ‘bottle’ A

lt \( \text{луṭ} \text{- } \text{луṭat} \) Dim. \( \text{lwṭa} \text{- } \text{lwṭat} \) ‘plain’ A

lw \( \text{lewwi} / \text{lewwi} / \text{tlewway} \) ‘to spin, to roll a cigarette or joint’ (lab) B Pass \( \text{tliewwa}\theta \) PP mlewwi / mlewya / mlewin

lw \( \text{tmelwi} \) ‘pan cake made out of meal baked in oil’ A

lwgr \( \text{talawgant} / \text{tilawgarant} \) ‘white bird that follows the farmer’ B

lwḥ \( \text{lluḥ} / \text{lluḥa} / \text{lluḥaṭ} \) Unity F. taluḥet - tiluḥtan ‘shelf’ C

lwn \( \text{llawn} - \text{ISalwan} \) Dim. \( \text{llweyyn} / \text{llweyyn} / \text{llweyyn} \) ‘colour’ (The diminutive refers to a nice colour.) A

lwn \( \text{llwina} - \text{llwinaṭ} \) ‘picarel (fish)’ A

lqwq \( \text{lewqit} \) Unity F. talewqitt - tilewqitan ‘match’ C

lwr \( \text{llawreya} - \text{llawreyya} / \text{llawreyya} \) ‘ass’ A

lwy \( \text{llewway} \) ‘kind of ivy’ A

lwz \( \text{llawz} \) Unity F. talewzit - tilawzitan ‘almond’ C

lymn \( \text{llaymun} \) Unity F. talaymunt - tilaymunan ‘lemon’ C

lyn \( \text{llylan} \) ‘traditional shampoo’ (It is made by boiling ash from the fireplace in a big bowl.) A

lẓ \( \text{alaẓen} / \text{alaẓen} \) ‘tomorrow’ B

lẓ \( \text{lẓuẓ} / \text{lẓt} / \text{ttluṭz} \) ‘to be hungry’ (intr) B

lẓr \( \text{llaẓ} \) Unity F. talaẓur - tilaẓurant Dim. lwiẓra ‘brick’ C

m \( \text{am} \) ‘like’ E.g. \( \text{am umaleḥ aḏ} \) ‘like this fish’ B

m \( \text{yemma} \) ‘mother’ B

mbṛ \( \text{lmembarr} \) ‘islamic pulpit’ A

md \( \text{medd} / \text{medd} / \text{tmedda} \) ‘to lie down’ (lab) B PP memduḏ / memduḏa / memduḏin

md \( \text{tamḍa} - \text{timḍiwan} \) ‘lake’ B

md \( \text{tamuḍa} - \text{timuḍiwan} \) ‘sow’ B

mdd \( \text{tamedda} - \text{timeddiwan} \) ‘eagle’ B

mdg \( \text{amdağgu} / \text{imĎuğa} \) ‘warble fly’ B

mdn \( \text{lemḏina} - \text{lemḏun} \) ‘city’ A

mdr \( \text{amḏer} - \text{imḏer} \) Dim. amḏeyyer - imĎeyyren ‘branch’ B

mdwd \( \text{lemḏewed} - \text{lemḏawed} \) Dim. lemĎiwed - lemĎiwdaṭ ‘trough’ A

mḍ \( \text{medḍi} / \text{medda} / \text{tmedday} \) ‘to sharpen’ (trans) B PP mmedḍi / mmeddya / mmęḍḍin

mdy \( \text{maḍi} / \text{maḍy-a} / \text{maḍ(y)-in} \) ‘pointed’

mšy \( \text{AP maši} / \text{mašš-a} / \text{maš-in} \) ‘go’ see d for ‘to go’
mžy  AP maži / maq-a / maq-in ~ maq-in ‘come’ see d for ‘to go’
méd  lmaida - lmaidaṭ ‘stomach’ A
mɣy  myi d / myi d / tmyi d ‘to grow’ (intr) B Caus issemiya d / ssemiya d / ssemay d
‘to (make) grow’ (trans) B (The d is obligatory.) E.g. azgasneṭ a d issemiya
isanen ‘Last year he grew teeth.’

mgn  lma_qana - lemwa٪en ~ lma_qanat ‘watch’ A
mgn  tmeqgen / itmeqgen ‘to feel good, be calm’ (intr) A VN ttemgin
mgnn  tamu٪nant - timu٪nanan ‘cooked egg’ B

mgr  mger / mger / megger ‘to harvest’ (trans) B cf. ḥsd for Pass and PP
mɣɣ  tameɣra - timeɣriwan ‘wedding’ B
mɣɣ  amɣar - imɣaren ‘old man’ F. tamɣart - timɣaran Dim. tamɣeyyerṭ ‘old women’ B
mɣɣ  amɣar ‘father-in-law of a woman’ B
mgr  amɣer - imeɣran Dim. amɣeyyer - imeɣeyren ‘sickle’ B
mɣɣb  ameyraṣi - lemɣarṣa F. tameɣraṣiṭ ‘Moroccan’ C
mɣɣ  meɣɣet / meɣɣet / tmeɣɣat ‘to hit’ (trans) B Pass tmeɣɣet PP mmeɣɣet / mmeɣɣta
    / mmeɣɣṭin
mɣz  amɣuz - imɣaz ‘nit’ B
mɣɣl  ama٪gal - ima٪galen ~ ima٪gal F. tama٪galt - tima٪galan ‘piece of bush’ (piece of
    bush that is hung in the stable for goats to eat.) B
mɣɣyz  ameɣɣayzu ‘type of plant’ B
mḥ  mḥa / mḥi - imḥa - imḥhi ‘to wipe clean’ (trans) B
mḥ  mḥi / mḥa / tmiḥ ‘to empty water’ (trans) B Pass tmaḥeṭ PP memyaḥ /
    memyaḥa / memyaḥin E.g. tmaḥeṭ lbaṭil ‘The boat has been emptied from the
    water.’

mḥl  lmaḥal - lemwaḥel ‘room’ A
mḥrb  lmeḥraḥ - lemḥareḥ Dim. lmeḥireḥ ‘place where the imam prays’ A
mhrz  lmeḥraṣ - imeḥraṣen ‘type of insect’ It eats wheat. C
mḥsd  lmeḥṣaḍ - lmeḥṣaḍin F. lmeḥṣada ‘jealous person’ A
mḥt  lmuḥiṭ - lmuḥiṭaṭ ‘ocean’ A
mk  lmika - lmikaṭ ‘plastic bag’ A
mk  muka - mukat ‘owl’ A
mkl  yemmawakal - immawakalen ‘kind of worm’ B
mklt  meklitta ‘type of fish’ A
mkn  lmaƙina - lm makaṭ ‘machine’ A
mkr  amalkar - imukar F. tamakart - timukar ~ timakaran ‘thief’ B
mktr  anmekṭer - imektaren ~ imektira ‘part of the plough’ B
ml analu - imula F. tamaluŋt Dim. tamwilekt - timwilkan ‘shadowy hill’ B
ml lmal ‘capital’ A
ml mel / mel / mmal ‘to show’ (intr) B PP mwerri / mwerrya / mwerrin E.g. daʔmen mmalay as imalḥen inu ‘I always show him my fish.’
ml mul - mwalin F. mula ‘owner’ A E.g. mul axyam - mwalin axyam F. mulaṯ axyam ‘host’
mlḥ amaleh - imalḥen Dim. amwileḥ F. tamaleḥt Dim. tamwileḥt ‘fish’ B
mlḥ lemlaḥ ‘salt’ A E.g. mul axyam - mwalin axyam F. mulaṯ
mlḥ amaleḥ / amaleḥ / muleḥ ‘to show’ (intr) B PP mwerri / mwerrya / mwerrin
ml ḥ amaleḥt - imalḥen Dim. amwileḥt F. tamaleḥt Dim. tamwileḥt ‘fish’ B
ml ḥ lemlaḥ ‘salt’ A
ml ḥ malḥ ‘capital’ A
ml ḥ amaleḥ / amaleḥ / muleḥ ‘to show’ (intr) B PP mwerri / mwerrya / mwerrin
ml ḥ amaleḥt - imalḥen Dim. amwileḥt F. tamaleḥt Dim. tamwileḥt ‘fish’ B
ml ḥ lemlaḥ ‘salt’ A
ml ḥ amaleḥt - imalḥen Dim. amwileḥt F. tamaleḥt Dim. tamwileḥt ‘fish’ B
ml ḥ lemlaḥ ‘salt’ A
mlk lmalik - imulḵaṯ F. lmalika - lmalḵaṯ ‘king’ A
mlk lmilk ~ lmilk ‘property’ A
mlk lmilkeyya - lmilkeyyaṯ ‘fishing permit’ A
mlk mlmek / mleḵ / melleḵ ‘to marry’ (trans) B PP mmlmek / mmelkka / mmelkkin
mlk mlmek ‘to marry’ (trans) B PP mmlmek / mmelkka / mmelkkin
Caus ssemleḵ / ssemleḵ / semleḵ ‘to let, make marry’ (trans) B imleḵ ʰḍes ‘He married with her.’ imleḵ fxes ‘He married another (additional) wife.’
mll amellul - imellulen Dim. amliwel - imliwlen F. tamellult - timellulan Dim. tamlwel - timliwl ‘white person’ B
mll mellul-eṯ ‘white’ Dim. mlliwel / mlliwel-a / mlliwel-in ‘somewhat white’ C
mlq lmilq - lemlaq Unity amileq - imilqen Dim. amwileq - imwilqen ‘grit’ C
mls melles / melles / tmellas ‘to smoothen’ (trans) B AP males / mals-a / mals-in
mls melles / melles / tmellas ‘to smoothen’ (trans) B AP males / mals-a / mals-in
mlṣ lmalṣ - lemlṣa Dim. lemlṣa - lemlṣā ‘blanket’ A
mlṣ lmalṣ ‘to smoothen’ (trans) B AP mallek / mallek-a / mallek-in
mlṣ lemlṣa ‘blanket’ A
mlṣ lmalṣ ‘to smoothen’ (trans) B AP mallek / mallek-a / mallek-in
mlṣ lmalṣ ‘to smoothen’ (trans) B AP mallek / mallek-a / mallek-in
mm memmu n tiṭṭ ‘apple of the eye’ B
mm tamemt ~ tamamt (ta-) ‘honey’ B
mm aman (wa-) ‘water’ B
mm tmenna / tmenna ‘to hope’ (trans) A
mnḍln mandalina Unity F. tamendalint - timendalinan ‘mandarin’ C
mnḍlm mnaḍem - medden ‘human being’ C
mne menne / menne / tmennae ‘to make hold’ (trans) B
mnqṛ lemnqar - lemnqer Dim. lemnqar - lemnqar ‘chisel, sting’ A
mnṯ tamunniṯ - timunniṯan ‘ass’ B
mnṯ tamunniṯ - timunniṯan ‘ass’ B
mnm mantika ‘margarine’ A
mnm mantika ‘margarine’ A
mнт₄ tamentart - timentaran ‘type of insect’ It is yellow, lives between the crops. B
mql lmqala ‘the first intestines of the goat that are eaten: liver, heart, kidney’ A
mqṛ / muqr / muqρ-ṛt ‘big’ Dim. mqiqer / mqiqr-ṛt ‘somewhat big’ B
mr lemra - lemrayat ~ lemrawat ‘mirror’ A
mr lmerra / lmerraṯ ‘goat intestine’ A
mr merr / merr-a / merr-in ‘bitter’ A
mr tammart - timmara Augm. ammar - immira (wa-) ‘beard’ E.g. yres ya
wammar nešt n lexla lit. ‘He has a beard as big as the wasteland.’ B
mrn lmirna - lmirnaṯ ‘type of fish’
mrn lemrina / lemrinaṯ ‘type of sea snake’
mrs amaras - imuras F. tamarast - timuras Dim. tamwirest ‘riverbed’ B
mry lmareya / lmareaṯ ‘tide’ E.g. lmareya n ššerq = east tide lmareya n ššafi = west tide A
mrnd mirinda - mirindaṯ ‘afternoon meal’ Small meal at about five o’clock S
mr umer ~ amer / umer ~ amer / tamer ‘to send’ (trans) B E.g. amrx imalḥen dar
uxyaṯ ‘I sent the fish home.’
mr lmiru ‘grouper (fish)’
mrbṯt amerbut - imribṭen Dim. amribṭ ‘small piece of rope’ B
mṛy tamurya ‘locust’ B
mrh amrah - imrahen ‘open place’ B
mrq lemraq F. lmerqa Dim. lemrqa ‘sauce’ A
mrš lmarṣa - lemrasi Dim. lemrşa - lemrıṣat ‘port’ A
mrṭ lmreṯ - l ترامب ‘sickness’ A
mṛtl lmurtal - lmurtaleṯ ‘flip in the water’ A/S
mṛtn merṭayn ‘twice, two times’ A
mṛwḥ tamerwaht - timerwaḥan ‘fan (in the hand)’ B
mṛx merṛaxu - meṛraxuwaṯ ‘mako shark’ S
mṛyṯ amaryat - imaryaten ‘stick for hitting’ B
mṛyṯ meṛyṭ / meṛyṭ / tmeṛyṭ ‘to bend repeatedly’ (intr) B
mṛẓ lmerža - lemrž ‘swamp’ A
ms amass - imassen ‘block on the head of cattle to tie the yoke to’ B
ms amnas - immasen ‘waist’ B
ms lmisa - lemses ~ lmissat Dim. lemsisa - lemsıṣat ‘table’ A
ms lmus - lemwas Dim. lemweyysen ‘retractable knife’ A
msḥ mṣeh / mṣeh / messeḥ ~ itasseḥ ‘to wipe’ (trans) B
msḥ ttimṣah ‘crocodile’ A
msq lmusiqa - lemwaseq ‘music’ A
mss messus / messus-ṛt ‘insipid’ Dim. msiwes / msiws-a / msiws-in ‘somewhat insipid’ C
mss tamessust - timeğusus ‘unsalted bread’ B
mslm ameslem - lemselmen F. tameslemt - timselmen ‘muslim’ C
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Word</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>msrn</td>
<td>lemsennen</td>
<td>‘type of pan cake’ A</td>
</tr>
<tr>
<td>msw</td>
<td>amessiwen</td>
<td>F. tamessiwt - timessiwan ‘old basket’ B</td>
</tr>
<tr>
<td>mš</td>
<td>lmaṣṣa / lmaṣṣat</td>
<td>‘sledge hammer’ A</td>
</tr>
<tr>
<td>mšt</td>
<td>amšet / imeštan</td>
<td>‘hip’ B</td>
</tr>
<tr>
<td>mš</td>
<td>amuš / imuššan</td>
<td>Dim. amšišu - imiššwen F. tamuššet - timuššan Dim. tamšišut - timiššwen ‘cat’ B</td>
</tr>
<tr>
<td>mšbl</td>
<td>mešbel / mešbel / tmešbal</td>
<td>‘to sift’ (trans) B</td>
</tr>
<tr>
<td>mšklṭ</td>
<td>meškilṭ / meškilṭat</td>
<td>‘bicycle’ A</td>
</tr>
<tr>
<td>mškpr</td>
<td>tameškeppart / timeškepparan</td>
<td>‘chicken’ B</td>
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<tr>
<td>mšn</td>
<td>lmašina / lmašina</td>
<td>‘train’ A</td>
</tr>
<tr>
<td>mšt</td>
<td>amšet / imešten</td>
<td>‘separation stone between two pieces of land to mark the boundary’ B</td>
</tr>
<tr>
<td>mšt</td>
<td>tamšeṭt / timešṭtan</td>
<td>‘comb’ E.g. tamšeṭt n uṭar - timešṭtan n uṭar ‘instep (of the foot)’ B</td>
</tr>
<tr>
<td>mštt</td>
<td>amešṭīt / imešṭat</td>
<td>‘small piece of rope’ B</td>
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<tr>
<td>mt</td>
<td>mmuṭ / mmuṭ / tmeṭtaṭ</td>
<td>‘to die’ (intr) B</td>
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<tr>
<td>mte</td>
<td>lemṭa</td>
<td>‘property’ A</td>
</tr>
<tr>
<td>mtn</td>
<td>mṭen / mṭen / ttamṭen</td>
<td>‘to ferment’ (trans) B</td>
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<tr>
<td>mtn</td>
<td>tamṭunt / timṭunan</td>
<td>‘yeast’ B</td>
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<tr>
<td>mtrkl</td>
<td>lmatrikula / lmatrikula</td>
<td>‘license plate’ A</td>
</tr>
<tr>
<td>mtwl</td>
<td>tameṭṭwalt</td>
<td>‘type of plant’ B</td>
</tr>
<tr>
<td>mṭ</td>
<td>mṭi / mṭī / meṭṭi</td>
<td>‘to lunch’ (intr) B PP myeddī / myeddyya / myeddīn Used by old people. Arabic tyeddā is more used nowadays.</td>
</tr>
<tr>
<td>mṭ</td>
<td>tameṭṭuṭ / timeṭṭuṭan</td>
<td>‘women’ tameṭṭuṭ n bāba nmem ‘stepmother’ B</td>
</tr>
<tr>
<td>mṭe</td>
<td>lemṭa</td>
<td>Dim. lemwiṭe</td>
</tr>
<tr>
<td>mṭl</td>
<td>mṭel / mṭel / meṭṭel</td>
<td>‘to bury’ (trans) B</td>
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<tr>
<td>mṭr</td>
<td>lm铷ur / lm铷wa</td>
<td>‘motorcycle, engine’ A</td>
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<tr>
<td>mṭṛḥ</td>
<td>lemṭreḥ / lemṭareḥ / lemṭireḥ</td>
<td>Dim. lemṭireḥ ‘stick to put bread in the oven’ A</td>
</tr>
<tr>
<td>mṭš</td>
<td>maṭiša Unity F. tamatišṭ / tamišṭan Augm. amatiš ‘tomato’ C</td>
<td></td>
</tr>
<tr>
<td>mṭš</td>
<td>metṭeš / metṭeš / tmeṭṭaš</td>
<td>‘to shake, swing’ (lab) B Pass tmeṭṭeš PP mmeṭṭeš / mmeṭṭeša / mmeṭṭešin</td>
</tr>
<tr>
<td>mṭṭ</td>
<td>amaṭṭaṭ / imaṭṭaṭen</td>
<td>‘grey lizard with no spots’ B</td>
</tr>
<tr>
<td>mṭṭ</td>
<td>amaṭṭuṭ / imaṭṭuṭen Dim. amtiweṭ / imtiwṭan F. tamatṭuṭ / timatṭuṭan Dim. tamṭiweṭ - timatṭuṭan ‘neglected useless person’ B</td>
<td></td>
</tr>
<tr>
<td>mṭtw</td>
<td>ameṭṭaw / imeṭṭawen</td>
<td>‘tear’ B</td>
</tr>
<tr>
<td>mṭṭyš</td>
<td>lemṭṭayša / lemṭṭayša</td>
<td>‘cradle’ A</td>
</tr>
<tr>
<td>mwž</td>
<td>lemwaža / lemwaž</td>
<td>‘wave, surf’ A</td>
</tr>
<tr>
<td>mx</td>
<td>lmuxx / lexax</td>
<td>‘brain’ A</td>
</tr>
</tbody>
</table>
ndh  neddeh / neddeh / tneddah ‘to guide (animals), to escort, to drive’ (trans) B
Pass tneddheṭ PP mneddeh / mneddha / mneddhin E.g. tneddheṭ lebhima y ahen ‘The mule has been escorted.’

ndm  ndem / indem ‘to regret’ (intrans) A Caus. nneddem / nneddem / tneddam ‘to regret’ (trans) B Pass tneddmeṯ PP mneddem / mneddha / mneddmin VN ttendim

ndr  nedder / nedder / tnedder ‘to shock after crying’ (intr) B Pass tneddreṯ PP mnedder / mneddra / mneddrin VN ttendir

nger  nger / nger / neγar ‘to make furniture’ (trans) B

nɛs  AP naces / naesa / naesin VN nncas A ‘to sleep’ cf. ʦ ‘to sleep’

nfs  neffes / neffes / tneffas ‘to breathe’ (intr) (used by older generation.) B
nfs  nnefs Dim. nnsifa - nnsifa ‘soul, spirit, breath’ A
nfs  tneffes / tneffes ‘to breathe’ (intr) (used by the young generation.) A

nft  nfeit / nfeit / nefeit ‘to shake’ (trans) B PP mnefuṭ / mnefuṭa / mnefuṭin

nfn  nafazên ~ lafažen ‘the day after tomorrow’ E.g. ḥetta dar nafazên ‘in two days’ B

nfnž  nafaznaž ‘in three days’ B

ng  angi / angi / nγgi ‘to push’ (trans) B PP mengi / mengkap / mengkapin

ngr  nigru - nigrus ‘brown dolphin’ S

ŋy  anayu ‘milk of a fig tree’ B

ŋy  inay - inayen ‘uvula’ B

ŋy  nγ / nγa / neqqa ‘to kill’ (trans) B

ŋyγ  anyur - inγuren F. tanyurt - tinγuren Dim. tanyeyyeř ‘stable, stall’ B

nhř  nnhar - nnuḥra Dim. nneḥṣer ‘day’ (The diminutive nneḥṣer means ‘a day’s wage’.) nneṣ n nnhar ‘noon’ A

nhř  nnhar ‘day’ E.g. nnhar aḏ ‘today’ A

nhr  nnhir - nnuhař Dim. nneḥyer ‘threshold, separation in a field’ A

nhy  nihaya - nihayat ‘end’ A

nhs  mneḥhas ‘copper’ A

nkř  nker / nker / nekker ‘to deny’ (trans) B PP menkuř / menkura / menkuřin VN nnaker

nkt  nukta - nuktař ‘joke’ A
| nm  | lemnama - lemnamat ‘dream’ A |
| nmr | nimiru - nwamer ‘number’ A |
| nmr | nnmer - nnmura Dim. nnmeyyer F. nnemra Dim. nnmeyyyra ‘panter’ A |
| nms | nnamus Unity F. tanamust - tinamusan ‘mosquito’ C |
| nn  | anin - ininen ‘fire stones’ (Three stones around the fire place.) B |
| nn  | nanna ‘older sister’ B |
| nq  | neqqi / neqqa / tneqqay ‘to clean’ (trans) B PP mneqqi / mneqqya / mneqqin |
| nq  | nnaqa - nnyaq ‘female camel’ A |
| nq  | nqi / nqiyy-a / nqiyy-in ‘clean’ A |
| nqb | mneqqaba ~ mneqqafet - mneqqahat ‘woodpecker’ (Old people use neqqafet while young people use neqqaha.) A |
| nqb | tamengoqt - timengoqan ‘gossip’ gas tangoqat ‘He gossips a lot.’ B |
| nql | tanqilt - tinqilṭan Dim. tinqilṭ - tinqilṭan ‘tobacco seedling’ B |
| nqr | nnuqra ‘silver’ A |
| nqṣ | amenqaṣ - imenqaṣen ‘carver’ B |
| nqṣ | nqeṣ / nqes / neqqes ‘to carve’ (trans) B PP menqiṣ / menquṣa / menquṣin |
| nqt | neqqet / neqqet / neqqat ‘to drip, leak, have spots’ (lab) B Pass tneqqat PP mneqqet / mneqqat / mneqqatn E.g. tneqqet talqimt aṭ ‘This bread has spots on it (it’s rotten).’ |
| nqt | taneqqat - tineqqatan ‘drop’ B |
| nqz | neqqez / neqqez / tneqqaz ‘to jump’ (lab) B PP mneqqez / mneqqaza / mneqqazin |
| ns  | anas - inasen ‘sparkles that fly around a fire.’ B |
| ns  | nes / nes / nunes ‘be extinguished’ (intr) Caus snes / snes ~ ssens / ssnus ‘to extinguish’ |
| nsb | nnsib - lensaḥ ‘father-in-law (of a man)’, brother-in-law’ nnsiba - nnsibaṭ ‘mother-in-law (of a man)’ A |
| nsm | nessem / nessem / tnessem ‘to smell’ (intr) B VN nnesma E.g. nnesma mezyana ‘A nice smell.’ |
| nsy | AP nasi / nasya / nasyin PP mensi / menseyya / menseyyn Caus nessi / nessa / tnessay ‘to make forget’ (trans) B E.g. inessa aṭ zeg lhemm nnes ‘He made him forget his worries.’ cf. t ‘to forget’ |
| nṣ | nnes ~ nnuṣ - lenṣus Dim. nṣeyyyes ‘half’ E.g. nnesṣ meqqur ‘the majority’ A |
| nṣb | anesṣab - inesṣabn Dim. anṣib - inṣiben ‘piece of iron on which bait is put’ B |
| nṣb | nṣeb / nṣeb / nesseb ‘to trap’ (trans) B VN nnsaḥa |
| nṣḥ | nṣeh / inṣeh ‘to advise’ (trans) A |
| nṣr | anesran - nṣara F. tanesren ‘Christian, European’ C |
| nṣl | anṣel - ineslen Dim. anṣeyyel - inṣeyyla F. tanṣelt ‘floor for straw’ B |
| nṣ | nniṣ Unity F. taniṣet - tiniṣṭan ‘apricot’ C |
nšb  nneššaḇ - nnšaḇ Dim. nnšišaḇ ‘bow, catapult’ A
nšr  lmenšer - lemmašer Dim. lemenšer ‘floor for drying figs’ A
nšr  lmenšer - lemmašer Dim. lemenšer ‘saw’ A
nt  lanta - lantawaṯ ‘female person’ A
ntxb  lintixaḇ - lintixaḇaṯ ‘election’ A
nt  tanuṭṭ - tinuṭṭan ‘wife of the brother’ B
nte  ntae / inta ‘to obey’ (intr) A E.g. ka-inta-lu i baba nnes ‘He obeys his father.’
nťg  nteq / nteq / neteq ‘to fly’ (intr) B Caus. sseteq / sseteq / sseteq ‘make fly’
ntn  anawitiin ~ liwitiin ~ niwitiin ‘in three days’ B
nťr  nter / nter / netti ‘to fly’ (intr) B Caus. sseter / sseter / sseter ‘make fly’
nťsr  lʃiʃiṣar ‘victory’ A
nťsr  ntaʃer / intaʃer ‘to win over’ (intr) A
nw  nu / nwa / nugg ‘be cooked, be ripe’ (intr) B Caus ssnu / ssnu / ssnaw ‘to cook’ (trans) B
nwl  anewwal - inewwila Dim. aniwiel - iniwelen F. tanewwalt - tinewwalan Dim. taniwelt - tiniwlan ‘A small hut’ B
nwx  nnwaʃ Dim. nnxel - nnxeyyel ‘palm tree’ Also called taḡeṯ n ṭṭmaṯ ‘tree of dates’ A
nyq  neyyeʃ / neyyeʃ / neyya ‘to aim’ (intr) B PP mneyyeʃ / mneyyeʃa / mneyyeʃin
nzl  Pass nnezzleṯ PP mnezzel / mnezzla / mnezzlai ‘to put down’ cf. rs ‘to land, to put down’
nẓm  nnežma - nnžum Dim. nnžiša - nnžimtaṯ ‘star’ A
nzq  neshe기에 / neshe / meshe ‘to be overripe (crops)’ (intr) B
p  puḇri - puḇreyyin F. puḇreyya ‘poor man, women’ A
pbr  lpemey ‘pancake’ A
pyr  lpeyry ‘pancake’ A
pwy  payeyyu - payeyyuwen ‘parrot’ C
pl  lpikala - lpikaš ‘bicycle’ A
plkn  lpuklan - lpuklanat ‘lepwakel ‘excavator’ A
pky  lpakeyya - lpakiya ‘pack’ A
pl  lpala - lpalaṭ ‘shovel’ A
plm  lepluma - leplumat ‘pen’ A
plp  lpulpu - lpulpus ‘octopus’ A/S
pls  leplaša - leplayaš ‘leplaša - leplišaṭ ‘seat’ A
plst  lpulisi - lpuliseyya F. lpuliseyya ‘police’ A
plstk  lplastik - leplastikaṭ ‘plastic’ A
pl  puḷu ‘ice cream’ S
ply leplaya - leplayath 'beach' A
pmpyg lpumpyis 'pampers' A/S
pncr pencher / pencher / penchar 'to puncture' (trans) B PP tpennchet PP mpencher / mpencha / mpenchir
pny lpunya - lpunyat 'punch' A
pp peppa n tyaten 'plant' lit. 'bread of the goats' B
prknt lprikanti - lprikanteyyat F. lprikanteyya 'nurse' A
prm lperrim - leprerem 'drill' A
prm lpirmi - lpirmes 'driver's licence' A/S
prpr iparparen 'money' No singular B
prpr perper / perper / tperper 'to fly' (intr) B
prx lparixa - lparixath 'middle-sized boat' It has a net that scrapes the sea-floor. A
prx lparixu - lparixus 'pulley block' A/S
przwz lpurzwazi - lpurzwazeyyin F. lpurzwazeyya 'rich' A
pst lpashtya - lpashteyyat 'pill, tablet' A
pst lpessita - lepsaset 'peseta' A
psmn lpsaman 'type of fish'
pskd peškaďyya - peškaďyyath 'hake (fish)' A/S
pxt pixuta - pixutath 'type of fish' A
pznzt lpizniz F. lpizenista - lebsanez 'business man, hash dealer' A
q qbl lqiḇla 'east' A
qbl qbeh / iqbeh 'to accept' (trans) A PP meqbul / meqbuła / meqbulin
qbl qebbel / qebbal / tqebbal 'to face towards mekka' (trans) B Pass tqebbleth
qbl taqbiṭl - tiq"bal ~ tiqbal 'tribe' B
qbr lmeqbařa - lemqabčer ~ leqbuṛa Dim. lemqiβer 'cemetery' A
qbt Pass nqeβet PP meqbuṭ / meqbuṭa / meqbuṭin 'to grab' see mz 'to grab'
qbt lqiḥta - lqiḥtat Dim. leqbiṭa - leqbiṭat 'grip' A
qbt taqebbiṭt - tiqebbiṭan Dim. taqebbiêt - tiqebbiêt Augm. aqebβit - iqebβaten 'handful'
of grain' B
qby aqbay - iqbayen Dim. aqbiyyeš - iqbeyyšen 'billy goat' B
qdf lmqadaf - lemqadef 'paddle' A
qdf qeddef / qedda / tqeddaf 'to row' (intr) B
qdr qder / iqder 'to can' (intr) A
qds lmqqdis 'mekka' A
qd lqaḍi - lquḍdat 'judge' A
qe  lqae - lqiean ‘bottom’ A
qcd  lqaeda - lqaedat ‘part of the plough’ A
qcd  lqaesda - lqaesdat ~ lqaweaid ‘custom’ A
qf  leafa - leafawat ‘nape of the neck’ A
qfl  leafel - leafula ‘lock’ A
qfl  lqefla - lefalat Augm. aqeflun ‘button’ A
qfqf  qefqef / qefqef / tqefqaf ‘to shiver’ (intr) B PPmqefqef / mqefqafa / mqefqafin
qftn  lqeftan - leqaten ‘moroccan dress’ A
qfz  qfez / iqfez ‘to be clever’ (intr) A AP qafex / qafza / qafzin E.g. qfez fxes ‘He is smarter than him.’
qht  taqahat - tiqahat ‘crow, raven’ B
qhw  lqahwa - leqhaiwa Dim. leqhiwa - leqhiwat ‘coffee’ A
qhb  lqehba - leqhaba Dim. leqhiha - leqhihbat ‘prostitute’ A
ql  lmeqal - lemqali Dim. lemqala - lemqalat ‘frying pan’ A
ql  lqulla - lqullat ‘tree trunk’ A
ql  qli / qla / qlli ‘to fry’ (trans) B Pass tteqlat PP meqli / meqliyya / meqliyyn
ql  qquil / qqel / teqquel ‘to return, become’ (intr) B qqlex d syas ‘I have returned from there.’
qlb  lqaleb - leqwaleb Dim. leqwileb - leqwlibat ‘mould, suppository’ A
qlb  qelleb / qelleb / tqellab ‘to taste’ (trans) B PPmqelleb / mqellba / mqellbin VN
ttawaq E.g. atay ad mqelleb ‘This tea has been tasted.’
qlb  qleb / qleb / qqalub ‘to roll’ (lab) B Pass nqelbet ~ tqelbet PP meqluh / meqluba / meqlbun
qld  qelleb / qelleb / tqellad ‘to imitate’ (trans) B Pass tqelladet
qle  leqleec - lequlea Dim. leqleyye ‘mast’ A
qle  leqlee ‘orchard’ A
qle  qellee / qellee / tqellae ‘to leave’ (lab) B Pass tqelleet PP mqellec / mqellea / mqellein
ql  qallu ‘type of (edible) plant’ B
ql  qll / qll-a / qll-in ‘few’ Dim. qliwel / qliwl-a / qliwl-in ‘somewhat few’ A
qlm  leqlem - leqlema Dim. leqleyyem ‘traditional pencil (with ink)’ A
qlq  aqelqul - leqlaqel ‘testicle’ C
qlls  aqellawes - iqellawes Dim. aqllis F. taqellawest - tiqellawes Dim.
taqellisit ‘water jug’ B
qm  qqim / qqim / ttym(a) ‘to sit’ (intr) E.g. iqqim gaales ‘He is sitting’ Caus sqim / sqim / ssqim ‘to make sit’ (trans) cf. gls for AP, Caus and PP.
qmğ  leqmiğa - leqmayež ‘blouse’ A
qmm  aqemmum - iqemmumen ~ iqemmam Dim. aqmigem - iqmigmen F. taqemmumt - tiqemmam Dim. taqmigemt - tiqmigman ‘mouth’ B
qmqm  aqamqam - iqamqamen ~ leqmagem F. taqamqamt - tiqamqaman ‘big person’ B
qm  tqemmer / itqemmer ‘to gamble’ (intr) A E.g. nekki tqemmer fxas ‘I bet on it.’
qn  qnum / quen / teqen ‘to tie, close’ (trans) B see šd and rtf for Pass and PP
qmbl  lqenbula - lqenbulat ~ leqnbel Augm. aqenbul ‘bom’ A
qndl  lqendil - leqnaked Dim. leqndilat ‘oil lamp’ A
qndl  qendel / qndel / tqendal ‘to be bright’ (intr) B Pass tqendlet PP mqendel / mqendla / mqendlin E.g. taqfukt hetqendal ‘The sun is very bright.’
qnn  aqennin - iqenninen Dim. F. taqennint - tiqenninan ‘ass’ B
qnn  lqanun - lqawanin ‘law’ A
qm  aqenqbu - iqenqba Dim. aqniqeḇ - tiqenqba ‘beak, point of a knife’ B
qns  taqnissa - tiqnisawan ‘contents of the belly of cattle’ B
qnt  lqent - leqnut Dim. leqnit ‘corner’ A
qnt  qennet / qennet / tqennaṭ ‘to lay on its side’ (trans) B Pass tqennet PP mqennet / mqennet / mqennat ‘corner’ A
qntt  lqentra - leqnatre Dim. leqntira - leqntirat ‘bridge’ A
qny  leqneyya - leqnayen ‘rabbit’ A
qqw  aqeqqiw ‘hail’ B
qqw  taqeqqiw – taoqyet - tiqeqqiw ‘granule’ B
qrd  amqerreḏ - lemqerreḏin F. tamqerreṭṭ ‘weak, small person’ C
qrd  lqirxda Dim. leqreyyda - leqridat ‘monkey’ A
qre  aqurric - tiqurric F. taqurrict - tiqurrian ‘head, bundle’ B
qreb  lqerqubi ‘pill, kind of drugs’ A
qreb  qerqeb / qerqeb / iqeṣaqeb ‘to knock’ (intr) B
qrṣ  aqerqašun - iqerqašunen F. taqerqašun - tiqerqašunan ‘multicoloured thing, person’ B
qrṣ  lqerṣ ‘shark’
qrt  taqerruṭṭ - tiqerruṭṭan ‘cockroach’ B
qṛṭṭ  aqurṭaṭ - tiqurṭaṭen ‘penis’ B
qṛṣn  aqerqašun-i / aqerqašuni-ya / aqerqašuniy-in ‘multi-colored’ A
qr  qqur / qquř / tyyar ‘to dry’ (intr) B Caus. ssqar / ssqar / ssqar ~ ssyar ‘to dry’ (trans) B E.g. amaras iqqur ‘The riverbed has dried.’
qr  qer / iqiṣ ‘to admit’ (intr) A
qr  qra / iqa ‘to study, read’ (trans) A Pass tteqraṭ AP qari / qarya / qaryin Caus. qerrī / qerrā / tqaṛray ‘to teach’ (trans) B PP mqerrī / mqerrya / mqerrin E.g. mqerrī zye Ḗba na ‘He is taught by his father.’
qṛb  aqrab - iqraḥen Dim. aqreyyeb - iqreyyben F. taqraḥt - tiqraban Dim. taqreyyeht -
tiqrīḥan ‘traditional bag’ It is made from a type of plant (taqrīt). B

qṛb  qerreb / qerreb / taqreb ‘to approach’ (lab) B Pass tqrebet PP mqrreb /
mqrreb / mqrreb E.g. iqreb dayri ‘He came closer to me.’ iqreb ikas ‘He
moved the glass closer.’ tqrebet lḥatil ahen ‘The boat came closer.’

qrib / qrib-a / qrib-in ‘near’ A

qreb  qere / qere / qurac A

qref  qerree / qerree / tquer ‘make/become bald’ (trans) B

qrfz  qerfze / qerfze / tquerfz ‘to pinch’ (trans) B PP meqrefz / meqrefza / meqrefzin VN
tquerfza - tquerfzaṭ

qrm  qrem / iqrem ‘to be silent’ (intr) A AP qarem / qarma / qarmin

qrn  aqrin - leqran F. taqrin ‘peer’ C

qqr  qerqer / qerqer / taqrqer ‘to be quiet after an argument’ (intr) B PP mqrqer /
mqrqra / mqrqrin

qṛṣ  aqrṛṣas - iqṛṛṣas F. taqṛṛṣast - tiqṛṛṣan Dim. taqrṛṣeht - tiqṛṛṣan ‘leaf of a
cactus, wooden tray to put bread in the oven.’ B

qṛṣ  leqṛṣ - leqrṣ - leqṛṣ ‘forcefull pull’ A

qṛṣ  qers / iqṛṣ ‘to pull forcefully’ (intr) A VN leqṛṣ ‘strong pulling’

qrt  qret / qret / qret ‘to break’ (lab) B Pass nqret PP meqret / meqruta /
meqruṭin VN leqṛṭ E.g. amesmar ahen tteqṛet ‘That nail has been broken.’

qṛṭ  aqrṭaṣ - iqṛṭaṣ ~ leqṛṭaṣ ‘type of plant’ C

qṛṭs  laqṛṭas - leqṛṭas Dim. laqṛṭes - leqṛṭṣat Unity F. taqṛṭast - tiqṛṭas ‘bullet’ A

qrwṭ  qerwṭ / qerwṭ / taqrwṭ ‘to stutter or stammer’ (intr) B PP mqrwṭ / mqrwṭa /
mqrwṭin

qṛṣ  aqrṣyes ‘kind of insect which kills trees’ B

qṣbṭ  qesbaṭṭa ‘type of plant’ A

qṣl  leqṣil F. taqṣilt Dim. taqṣeyyeht ‘Grain that has not yet grown ears.’ C

qṣ  imeqqaṣ - lemqaqes Dim. lemqaqes - lemqaqes ‘scissors’ A

qṣ  qeṣṣes / qeṣṣes / tqaṣṣas ‘to cut’ (trans) B Pass tqaṣṣas PP mqaṣṣes / mqaṣṣa /
mqaṣṣin VN tteqṣis

qṣb  taqṣebt - tiqṣeban Dim. taqṣeyyeht - tiqṣeyyban ‘bamboo’ Augm. aqṣeb - iqṣeben
Dim. aqṣeyyeb - iqṣeyyben B

qṣbṛ  leqṣbuṛ ‘parsley’ A

qṣh  qaṣeh / qaṣh-a / qaṣh-in ‘hard’ Dim. qaṣeh / qaṣḥ-a / qaṣḥ-in ‘somewhat
hard’ A

qṣḥ  qaṣṣeh / qaṣṣeh / tqaṣṣah ‘to harden, to become stiff’ (trans) B Pass tqaṣṣhet PP
mqaṣṣeh / mqaṣṣa / mqaṣṣin E.g. mqaṣṣeh ataṭ nnes = ‘His leg is stiff.’

qṣḥ  teqṣiḥa - teqṣiḥat ‘bruise’ A
qṣr  qṣir / qṣir-a / qṣir-in ‘short’ qṣirser / qṣir-ser ‘somewhat short’ A
qṣr  qesser / qesse / tqeṣsar ‘to enjoy the night’ (intr) B
qṣr  qesser / qesse / tqeṣsar ‘to shorten’ (trans) B PP mqesser / mqessra / mqessrin
E.g. iqessar as ḫaren ‘He has shortened his legs.’
qṣm  qsem / qsem / qsum ‘to share, divide’ (trans) B Pass tqeṣmeṭ PP meqsum / meqsumin E.g. qesm-awet ḫet morra ‘Divide it between you.’
qš  lqeše - leqšuš ‘to enjoy the night’ (intr) B
qš  lqešše - leqšuš ‘to shorten’ (trans) B PP
mqešše - meqšum / meqšumin
E.g. iqešše as ḫatren ‘He has shortened his legs.’
qṣm  qem / qem / qqem ‘to share, divide’ (trans) B Pass
mqešše - meqšum / meqšumin
E.g. iqešše as ḫatren ‘He has shortened his legs.’
qš  lqešš / leqšuš ‘tree bark’ A
qšbl  aqušbal ‘type of plant’ B
qšɛ  lqešɛ / leqšuš ‘tableware’ A
qšf  taqaššuft ‘poverty’ B
qšq  aqesquš / iqušqaš ‘skull’ B
qšr  aqšuṛ / iqšaṛ Dim. aqšeyyeṭ - iqšeyyren F. taqšuṛt Dim. taqšeyyeṛt - tiqšeyyran
‘shell, bark’ B
qšr  qesse / qesse / tqeṣser ‘to peel’ (lab) B
qšr  taqšuṛt / tiqšiwšen ‘snail, shell, skull’ B
qšr  ttqašuṛt / ttqašuṛt Dim. taqšuṛt Dim. taqšeyyeṛt - tiqšeyyran
‘shell, bark’ B
qš  ḡetta - leqṭet Dim. leqṭiwa ‘bunch of cane’ A
qtl  leqṭila - leqṭilaṭ ‘murder’ A
qtl  lqettala - lqettalaṭ ‘cobra’ Augm. aqettalun ‘big cobra’
qṭ  leqṭaṭ Dim. llqiqṭaṭ ‘tongs’ E.g. leqṭaṭ n ikemzan ‘nail scissors’ A
qṭe  qetṭee / qetṭee / tqeṭṭeṭ ‘to cut (down)’ (lab) B Pass tqeṭṭeṭ PP meqṭṭeṭ / meqṭṭee / mqeṭṭee / mqeṭṭeen VN
qṭn  leqṭen - leqṭina Dim. leqṭina ‘cotton’ leqṭina also means ‘handcuffs’ A
qṭr  qetṭer / qetṭer / tqeṭṭar ‘to drip, leak’ (lab) B Pass tqeṭṭar PP meqṭṭaṭ / meqṭṭra / meqṭṭrin E.g. yan ỉi ỉqetṭer aman ỉd ‘Someone leaked this water.’
qṭr  taqš̱etṭiṭ / tiqš̱etṭiṭ ‘drop (of liquid)’ B
qw  ḡit / ḡit-qye / ḡit-qye ‘strong’ A
qwm  lqawm ‘people’ A
qwwq  ḡawqeq / ḡawqeq / tqaqeq ‘to tickle’ (trans) B
qww  lqaww - leqwaṭ Dim. leqweyyen ‘arch’ A
qww  qewweṭ / qewweṭ / tqwewwaṭ ‘to bend over’ (intr) B PP meqewweṭ / meqewwaṭ / meqewwaṭen
qyt  tqaṭṭiṭ / itqaṭṭiṭ ‘to vomit’ (trans) A
qyt  lqayṭun / leqwaṭen ‘tent’ A
qzdr  lqezdar - lqezdariṇ F. lqezdara ‘tinmaker’ A
qzdr  lqezdur - leqzader ‘tin, can’ A
qzn  aqezzun - iqezzunen Dim. aqzizen - iqizizenen F. taqezzunt - tiqezzunan Dim. taqzisent - tiqzisnan ‘dog puppy’ B
qzz  aquzzaz - iquzzazen F. taquzzazt - tiquzzazan ‘ass’ B
qże  aquzzie - iquzzizeen ‘squeeze’ B
qże  qezzee / qezze / tqezzee ‘to pinch’ (trans) B Pass tqezzeet PP mqezze / mqezza / mqezzein
qžż  aqżiču - iqżičuwen F. taqżičuț - tiqżičuțan ‘toy’ B
qż  aquż - iqżen ‘kind of a blue patridge’ B
r  ara ~ ura / ura / ttara ‘to write’ (trans) B See ktb for alternative, Pass and PP.
      aru ~ uru / turu / ttaru ‘to give birth’ (trans) E.g. hettaru tafulast ku nnhar tiwfalan ‘The chicken lays eggs every day.’ B
      rri / rri /  rust ‘to vomit, give back, plant’ (trans) irraz d = ‘He vomits.’ B
      tara - tariwan ‘earth between meadows’ B
rb  - / raḥ / trriḥ ‘to destroy’ (intr) B E.g. axyam ahen iraḥ ‘That house is destroyed.’ cf. ryb for causative.
rb  rraḥa ‘reef’ A
rb  tarbat - tirbaṭan Dim. tarbeyyet - tirbiṭan ‘young woman’ B
rbb  arriba (wa-) - irriben ‘stepson’ B
rbb  tarbiḥät (ta-) - tirbiḥat ~ tirbiḥan ‘stepdaughter’ B
rbe  larbe ‘wednesday’ A
rbh  rbeḥ / rbeḥ / rebbeḥ ‘to earn, to win’ (trans) B Pass trebbḥet PP merbuḥ / merbuḥa / merbuḥin VN rbeḥ
rby  rruḥyu - rrusahaan F. rruḥya - rrusahaan ‘blond’ A/S
rby  rruhu-u / ruḥya-a / ruḥya-us / ruḥya-at ‘blond’ A/S
rdh  rdeḥ / rdeḥ / redeḥ ‘to be aroused’ (intr) B
rdn  irden ‘wheat’ B
rg  rga / irga ‘to hope’ A AP raż / raṣya / rażin
rg  rraḥa - rrʁawning ‘hope’ A
rdʁ  Pass tredḥet PP merḍuḍ / merḍuda / merḍuḍin ‘to give back, to plant, to sow’ cf. tredḥet taferkiwt ahen s ḫebb ‘The garden has been planted with wheat.’ cf. r for base verb.
re  rrọsi - rrọsyan F. rrọcy ‘shepherd’ A
reb  receḥ / receḥ / rececheb ‘to scare, to want badly’ (trans) B PP merceuḥ / merceuḥa / merceuḥin VN rrueḥ Caus receceb / receceb / trececeb ‘to scare’ E.g. merceuḥ x ḫaża inşi ‘He wants something really badly.’ E.g. receceb x aseyyal ahen ‘I scared that boy.’
rf  arifi - rrwaFa F. tarifiṭ ‘riffian’ C
rfes / rjes / reffes ‘to knead’ (trans) B cf. εζν for Pass and PP.

targa - tirgiwan ‘canal’ B

tirgett - tirgan ‘embers’ B

argel ‘type of plant’ B

rrigalu - rrigalus ‘present’ A/S

argaz - irgazen ‘man’ B

ssr uy ~ ssrey / ssrey / ssruy ‘to light’ (trans) B

rrywa - rrryawi ‘foam’ A

rrha - lerhi Augm. arehwin ‘stone mill’ A

rrh ‘rrhha - rrrhath ‘fragrant, smell’ A

rrheyya - rrwha Dim. rrwiheyya - rrwiheyyaṭ ‘traditional women’s shoe’ A

tarhebt Dim. tarheyyebt Augm. arheb - irehhawen ‘land’ B

rehhel / rehhel / trehhal ‘to move house, migrate’ (intr) B

rk / rka / rekku ‘to rot’ (intr) B

tarekt - tirektan ‘newborn calf’ B

AP rakeb / rakba / rakbin ‘to ride, mount’ cf. n for verb.

rekkeb / rekkeb / trekka ‘to make mount, place on top’ (trans) B Pass rtekbaṭ

PP mrekkeb / mrekkba / mrekken

rke / irke ‘to bend through the knees for prayer’ (intr) A AP rakee / rakea / rakesin PP merkue / merkuea / merkuein

arekkal - irekkila Dim. arkek - irekkal F. tarekkalt - tirekkila Dim. tarkikelt - tirkiklan ‘dog’ B

rkel / rkel / rekkel ‘to kick’ (trans) B VN rrekla

tarkelt ‘type of plant’ B

ttbekina - ttekinaṭ ‘place where one lies when one is sick’ A

rrmuka - rrmukat ‘big truck’ A

rrnu / rna / rennu ‘to add’ (trans) B

larneb ‘hare’ A

luring - lurings ‘beacon’ (This is a plastic bottle to recognize where the anchor of the net is)’ A

rrqba - rrrqbat ‘murder’ A

tarqieet - tirqiṣtan ‘rag’ B

arrar - irraṃen ‘threshing-floor’ B

res / res / tres ‘to land’ (intr) B

arsin (wa-) ‘famine, hunger’ E.g. aṭiyupia gas arsin ‘There is hunger in Ethiopia’ B

buriš - iburišen Dim. abwireš ‘ant with wings’ A
res / res / trus ‘to land, to come down’ Caus sres / sres / ssrus ‘to put down’ (trans) B cf. nzl for Pass and PP.

rš rṛša ‘the blunt part of a pickaxe’ A

ršq ršeq / rseq / rešseq ‘to split’ (lab) B PP meršuq / meršuqa / meršuqin

rtēb rteḥ / irteḥ ‘to be scared’ (intr) A PP meteḥ / meteḥa / meteḥin

rtl rṛtita Dim. tarṭeyyel - tirtilan ‘spider’ C

rtw tartiwt - tariwan ‘sleep around the eyes’ B

rš rṛša ‘the blunt part of a pickaxe’ A

ršq ršeq / rseq / rešseq ‘to split’ (lab) B PP meršuq / meršuqa / meršuqin

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rtl rṛtita Dim. tarṭeyyel - tirtilan ‘spider’ C

rtw tartiwt - tariwan ‘sleep around the eyes’ B

rš rṛša ‘the blunt part of a pickaxe’ A

ršq ršeq / rseq / rešseq ‘to split’ (lab) B PP meršuq / meršuqa / meršuqin

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rtl rṛtita Dim. tarṭeyyel - tirtilan ‘spider’ C

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lmerfee - lemrafee Dim. lemrifee - lemrifeeṯ ‘shelf’ A
rfɛ / rfee / rffee ‘to carry’ (trans) B Pass treffeṯ
ṛḥ ‘soul or spirit’ A
lrḥi - lemrḥi - lemrḥieth Dim. lemrḥieth ‘homosexual man’ A
ṛml F. ṛmla Augm. aremlw ‘thick sand’ Dim. ṛmla ‘sand’ A
ṛmn Unity F. tarummant - tirummmanan ‘pomegranate’ tarummant n
lemramra ‘cheek’ B
ṛmś ‘remmeš / remmeš / tremmaš ‘to blink’ (intr) B
ṛmy ‘remmayęṯ ‘sling’ A
ṛn ‘lurni - lurnis ‘wage for one day’ spanish through arabic S
ṛny ‘laraneyya - laraneyyaṯ ‘type of mackerel’ A
ṛps ‘arappas - irappisa Dim. arpipes - irpipes F. tarappast - tirappisa Dim. tarpipes - tirpipesn ‘straw hat’ B
ṛqɛ / ṛeqqeɛ / tṛeqqa ‘to repair clothing’ (trans) B Pass treqqaṯ PP mṛeqqe
mṛeqqa / mṛeqqin VN teṛqiɛa
ṛqm ‘raquo - łużarqam ‘number’ A
ṛqq ‘reqqaq / reqqaq ‘to make thin’ (trans) B Pass treqqaq PP mṛeqqaq / mṛeqqaqin VN terseqa
ṛqq / ṛqiq / ṛqiqpa / ṛqiqpin ‘thin’ Dim. ṛqiqeq / ṛqiqeq ‘somewhat thin’ A
ṛs ‘ṛs ‘ṛsas - łueryu ‘cape’ A
ṛṣṣ / ṛṣṣ ‘ṛṣṭ ‘ṛṣṭa ṛṣṭawen ‘pus’ B
ṛṣ / ṛṣ ‘ṛṣṣ / ṛṣṣ ‘ṛṣṣa ṛṣṣa ‘to splash’ (trans) B PP merṣuš / merṣuša / merṣšin
ṛṭb / ṛṭeḇ / ṛṭṭa ṛṭṭa ‘to soften’ (trans) B Pass ṛṭṭab PP mṛṭṭeḇ / mṛṭṭba / mṛṭṭbin
ṛṭb / ṛṭb-a / ṛṭeḇ ‘soft’ A
ṛṭe ‘ṛṭe ṛṭṭeṭ ‘to suckle (breast)’ cf. ṭṭ ‘to suckle’
ṛw ‘lrari ‘deer’ (They do not live in the ghomara area.) A
ṛwd ‘ṛwdi - ṛwayeq ṛwayeqa ‘tire, wheel’ A
ṛwd ‘ṛwdi ‘loud noise’ A
ṛwh ‘ṛwh / ṛwh ‘ṛwha ‘to lift, return smth, carry’ (trans) B Pass trewweḥet
PP mṛewweḥ / mṛewweha / mṛewwehin (mṛewweḥ can also mean ‘to have a cold).”
ṛwh ‘ṛwh Dim. ṛweyey ‘air’ E.g. ṭṣuṭ ṛwha ‘The wind is blowing.’ A
ṛx ‘ṛxa ‘cheapness’ A
ṛxs ‘ṛxis-a / ṛxis-in ‘cheap’ A
ṛyḥ ‘ṛyeh / ṛyeh ‘ṛyyaḥ ‘to rest’ (intr) B PP mṛreyyaḥ / mreyyha / mreyyhin
ṛys ‘ṛrays - ṛways ‘leader’ A
ṛẓ / ṭṛeẓ / ṭṭṛeẓ 'to break' (lab) B E.g. lkas ṭṛeẓ 'the glass is broken.' ṣeṛu ṭṭṛeẓ s ḫmaṣṣa 'Stone is (can be) broken with a hammer.' ḥeṛya ṭṭṛeẓ 'It breaks quickly.'  

ṛẓ ṭṛawẓ 'rice' A  

ṛẓ ṭṛeẓza - ṭṛeẓ Augm. arṛeẓziw 'turban' A  

tarẓint - tịrịzina 'type of fig tree' It has a red small fig. B  

ṛẓzn arṛeẓzan - irṛeẓzanen Dim. arṛiże - irṛiże 'wasp' B  

s  

gu / gu / ṭessa 'to lay down a cloth for sleeping' (trans) B + IO (remembered verb.)  

s su / gu / sess 'to drink' (intr) B  

s tasa - tisēkən 'cow'  

s tusut 'coughing fit' B  

s yus d / yus d / ṭas d 'to land, be related to' (intr) B The deictic clitic d is obligatory. E.g. ittas as d 'He is related to him.' ineqeqz ṭeq ustih, yus d g terheḥ 'He jumped from the roof and landed on the ground.'  

sbb ssabab - ssababat F. ssababa 'cause' A  

sbb ssbab - ssbabat 'magical note written by imam' A  

sbe ssabee - ssabīee 'birth ceremony' A  

sbe ssbee - ssbeecə Dim. ssbeeyeec F. ssbiče - ssbiçat Dim. ssbiče - ssbiçat 'lion' A  

sbeκʁwʃ sbekehrwees 'part of the goat stomach' A  

sbɣ sbey / sbeɣ / ssbey ~ ssbey 'to dye, paint' (trans) B Pass tsebyeṭ PP mesbuv / mesbuya / mesbuvin  

sbɣ ssbiya - ssbiyət 'paint' A  

sbɣ ssbeɣ - ssbhuqat 'morning' A  

sbɣ ssbneyya - ssbna Dim. ssbneyya - ssbneyyaq 'headband' A  

sbɣ seber – sebeɣ / tsebar 'to support (in grievance)' (trans) B  

sbɣ ssuɣri - ssuɣris 'envelope' A/S  

sbɣ ssbζsi - ssbqa 'weed pipe' A  

sbɣ ssbɣt 'saturday' A  

sbɣ ssbɣtar - ssbɣtarat 'hospital' A  

sd lụssaq - ḥụssaqat 'teacher' A  

sd ssidil - ssidis 'CD' A/S  

sd lụs - ssdə 'sound or noise' A  

sd lụs - ssdəqat 'sound or noise' A  

sd lụs - ssdəqat 'sound or noise' A  

sdl tasiddelt - tisiddilan 'small wall around the house' B
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<tr>
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<td>sdr</td>
<td>ss ductura ‘chest’ A</td>
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<td>sgeh</td>
<td>sege / sege / tsege ‘to encourage’ (trans) B PP mseg / mseg / mseg VN ttesz</td>
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<td>se</td>
<td>sea / isea ‘to beg’ (intr) A</td>
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<tr>
<td>sed</td>
<td>sseidi a ymellulin - ssayed a ymellulin ‘type of white fig’ sseidi lekhal - ssayed kulel ‘type of black fig’ A</td>
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<td>sey</td>
<td>amesay - imesayan F. tamesayt - timesayan ‘beggar’ B</td>
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<tr>
<td>sf</td>
<td>asafu - isufa F. tasafut - tisufa ‘torch’ B</td>
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<tr>
<td>sf</td>
<td>asif (wa-) - isaffen F. tasift - tisiftan ‘river’ B</td>
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<tr>
<td>sf</td>
<td>ssfi / sfα / ssafay ‘to fester, to overflow’ (lab) B PP messfi / messfiya / messfiyin</td>
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<td>sf</td>
<td>tasaft - tsafan ‘beech’ B</td>
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<tr>
<td>sff</td>
<td>ssиф / ssaf / ssиф ‘to sieve’ (trans) B cf. yrbl for Pass and PP.</td>
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<td>sfnη</td>
<td>ssfenη Unity F. tifenηkt - tifenηkan ‘kind of donut’ C</td>
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<tr>
<td>sfr</td>
<td>ssfar ‘kind of copper’ A</td>
</tr>
<tr>
<td>sg</td>
<td>asuggay - isuggayen ‘dirty cloth’ (Used to pick up hot material.) B</td>
</tr>
<tr>
<td>sg</td>
<td>sag / isug ‘to drive’ (trans) A Pass isaget</td>
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<tr>
<td>sgl</td>
<td>asagul - isagulen F. tasaqult - tisaqulan ‘hook’ B</td>
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<tr>
<td>sgn</td>
<td>asegnu F. tasegnu - tisegnutan ‘cloud’ B</td>
</tr>
<tr>
<td>sy</td>
<td>suy / sey / ssay ‘to buy’ (trans) B cf. śr for Pass and PP</td>
</tr>
<tr>
<td>syn</td>
<td>aseyν - iseyνa ‘big needle’ B</td>
</tr>
<tr>
<td>syn</td>
<td>asyun - isynan Dim. asy sayen - isay eynen F. tasyunt - tisy ηnan Dim. tasy sayen - tisy ηnan ‘robe’ B</td>
</tr>
<tr>
<td>sγr</td>
<td>asyar - isyaren ‘wood, sticks’ B</td>
</tr>
<tr>
<td>sγr</td>
<td>tasyart - tisyaran Dim. tasyyeyert - tisyeyyran ‘part or piece’ B</td>
</tr>
<tr>
<td>shl</td>
<td>shal / ishal ‘to become, be easy’ (intri) A AP sahel / sahla / sahlin Caus. sahel / sahel ‘to make easy’ (intri) B also seh / seh / tehhal ‘to make easy’ (intri) B</td>
</tr>
<tr>
<td>sγr</td>
<td>sehher / sehher / tehhar ‘to do magic’ (trans) B PP msehher / msehra / msehrin</td>
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<tr>
<td>sγγhar</td>
<td>ssehγhar - ssehγharin F. ssehγara ‘wizard’ A</td>
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<td>sγr</td>
<td>sshur ‘dawn, breaking of the fast in the ramadan’ A</td>
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<tr>
<td>sγt</td>
<td>ssuht ‘type of insect’ (It makes the grain sour.) A</td>
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<tr>
<td>sk</td>
<td>amessaki - imessakiyen ‘an unploughed field’ B</td>
</tr>
<tr>
<td>sk</td>
<td>sskekka - sskek ‘coin’ A</td>
</tr>
<tr>
<td>skh</td>
<td>sskuh / sskuh / ssku ‘to cough’ (intr) B</td>
</tr>
</tbody>
</table>
skn  asekni - isekna ‘big needle’ B
skn  sken / isken ‘to live’ (intr) A AP sašen / sašna / sašnin
skn  lmeskin - lemsašen ~ lmusašen Dim. lemsišen - lemsišna F. lmeskina ‘poor person’ A
skr  sker / isker ‘to get drunk’ (intr) A AP sekeran / sekrana / sekranin
skr  sker ~ sekker / sker ~ seker ~ sskar ‘to do’ (trans) B
skr  tasekkurt - tisukran ‘female partridge’ B
skr  tiskert (ti-) ‘garlic’ B
skr  ssukkar ‘sugar’ A
skt  ssket ~ skuṭ / sket / sekket ‘to be quiet, silent’ (intr) B AP saket / sakta / sakṭin
skt  Caus. sekket / sekket / tsekkaṭ ‘to silence’ (trans) B Pass tsekket PP msekket / msekkaṭ / msekktin
skw  tasekkawt ‘a fight between young rams’ E.g. tkaṭen tasekkawt ‘They (the goats) are having a fight.’ B
skw  asekkaw - isekkawen ‘horn’
skyr  sskayri F. skayreyya ‘drunk’ A
sl  asla - islan F. taslaṭ - tislaṭan ‘bride(groom)’ Also taslaṭ n lehwa ‘rainbow’ B
sl  sal / isal ‘to owe’ (trans) A E.g. ka-ysallu leflus ‘He owes him money.’ (fr ‘to owe’ is used as well). Both are used.
sl  sell / sella / tesla ‘to hear’ (intr) B E.g. sellay as is ‘I have heard him.’ sellay yres ‘I listened to him (I obeyed him).’
sl  tisila (n uwri) ‘shoe’ No SG B
slf  aslif - islifin F. tasliṭ - tisliṭan ‘borther/sister of wife’
slf  salluf ‘high hair’ A
slf  sellef / isellef ‘to lend, borrow’ (trans) B Pass tsellef PP msellef / msellya / msellyin E.g. isellef ahen ‘He has lent them.’ E.g. isellef as ‘He lent him (money).’
slf  isellef zgas ‘He borrowed it from him.’ ša ṭ isellef leflus ‘He is going to lend me money.’
slf  sassef / asellef ‘tick’ B
slḥ  šaleh / šaleḥ /tšalāḥ ‘to reconcile’ (trans) B
slk  sselk - ssluka Dim. ssleyyek - sslikaṭ ‘iron wire’ A
slm  ssellem / ssellem / tsellam ‘to greet’ (trans) B Combines with the preposition fx. E.g. isellem fxes ‘He greeted him.’
slm  ssellem / ssellem / tsellam ‘to permit’ (intr) B VN tteslim It takes the indirect object. E.g. isellm as ‘He gave him permission.’
slm  ssellem / ssellem / tsellam ‘to surrender’ (trans) B Pass tsellмет PP msellem / msellem / mselmin E.g. isellem ḍḍmay nnes ‘He surrendered himself.’
slm  ssellum - sslalem ‘ladder’ A

506
slm
  ssilm ‘peace’ A

sls
  asalles Dim. aslîwes Dim. tasliwest ‘darkness’ (The diminutives refer to
darkness in different degrees, e.g. tasliwest n ssbah = between light and
darkness. Also: asalles xendris = extreme darkness). B

slls
  lmusalsal - lmusalsalat ‘soap’ A

slls
  selsel / selsel / tselsal ‘to bake grain’ (trans) B Pass tselslet PP mselsel / mselsela
  / mselselin

slt
  aslet ‘two years ago’ E.g. tayat n uslet ‘the goat of two years ago’ aslet n uslet
  ‘three years ago’ B

slt
  slet / slet / ssluṯ ‘to remove’ (trans) B Pass tseltet PP mesluṯ / mesluṭa / mesluṭin

slx
  slex / slex / sslux ‘to skin’ (lab) B Pass tselslet PP meslux / mesluxa / mesluxin

sm
  lisem - lismuṭa ‘name’ A

sm
  ssemm ‘poison’ A

sme
  semmee / semmee / tsemmae ‘to sound, listen to’ (trans) B

smḥ
  sameḥ / sameḥ / tsamah ‘to forgive’ (intr) B Pass tsamḥet PP msameḥ / msamḥa
  / msamḥin E.g. ismeh gas ‘He abandoned it.’

smḥ
  smeḥ / smeḥ / ssmuḥ ‘to forgive, to abandon’ (intr) B PP mesmuḥ / mesmuḥa / mesmuḥin

smḥ
  tsameḥ / itsameḥ ‘to make up’ (intr) A E.g. tsameḥ ʾides ‘He made up with him.’

smm
  ssamm / ssamem / ssuum ‘to suck’ (trans) B

smn
  ssimana - ssimanaṯ ‘week’ A

smr
  asammer - isammiren ~ isummar F. tasammiran - tisammiran Dim. tasmimert -
tasmimertan ‘open sunny land on a hill’ B

sn
  asan - isanen ‘tooth’ B

sn
  asun - isunen ‘cooked barley’ The plant tifergallan is added to it. B

sn
  sna - ssin ‘age’ A

sn
  ssen / ssen / ssen ‘to know (something/someone)’ (trans) B See ērf for Pass and

snb
  Isaṣnaḥ ‘idol’ A

snd
  ssedu / ssenda / ssendaw ‘to churn’ (trans) B VN lemxiṭ

snd
  tasenduṭ ‘traditional butter’ B

snḥ
  ssnaḥ ~ sslaḥ ‘weapons’ A

snsl
  asenslu - isensluwen ‘spine’ B

snsl
  ssensla - ssnasel Dim. ssnisla - ssnislaṯ ‘necklace, chain’ A

snt
  ssinta - ssintaṭ ‘cassette’ A

sntf
  ssentef / ssentef / ssentaf ‘to wound’ (lab) B PP msentef / msentfa / msentfin

sny
  ssiniya - sswni ‘tray’ A
sq

ssuq - leswaq Dim. sswiqa - sswiqat ‘market’ (The sswiqa is an alternative market that is held on another day if there is no market held on the normal day.) A

sqd

sezqaḏ / sezqaḏ / tseqqad ‘to tend (goats)’ (trans) B

sqf

ssqef - ssqef Dim. ssqafa - ssqafat ‘roof’ A

sqqwq

tasqawqawt - tisqawqawan ‘cone’ B

sr

assar (wa-) ‘the time in the afternoon when the goats go back into the field’ B

sr

sar / isir ‘to continue’ (intr) A

sr

tasar - tisura ‘key’ B

srbs

tassart - tissaran ‘part of the plough’ B

srdb

sserdan - ssarden Dim. ssraden Augm. ssardin - ssardinen ‘male mule’ B

srdf

ssardin - ssraden Dim. ssraden Augm. ssardin - ssardinen ‘sardine’

sr

ssref / ssref / ssurf ‘to comb’ (trans) B

sr

tasraft - tisrafan ‘grain storage, whirlpool’ B

srτl

aserrayyul ‘kind of plant’ B

srk

tasarka - tisarkiwan Augm. asarkiw ‘a rubber shoe’ (Used before the use of modern shoes.)

srmm

sserm / ssrem / tserrem ‘to comb’ (trans) B PP tsrem / msrem / msremmin

srqzt

sserraqzziṯ ‘cockroach’ A

srτ

ssrir - ssrayer ‘hand made bed’ A

srτσr

ssrsar - ssrer Dim. ssreser - ssrerreyyat ‘alarmclock’ A

srwτ

serweṯ / serweṯ / tsweṯat ‘to thresh’ (lab) B cf. drs for VN

srx

aserrix ‘cold’ B

sry

ssaryat - ssaryat ~ ssawi ‘pile’ A

ṣrżm

ssṣržem - ssṣržem Dim. ssṛžem ‘window’ A

ss

sis / sas / ssyas ‘to boil’ (intr) B

ssm

susem / susam ~ isusem / tsusum ‘to listen’ (intr) B E.g. isasem as i wɛeyyal ahen

sṛžm

tsisima ‘needle’ B

ssn

sisen / sasen ~ isisen / tsisen ‘to dab bread with gravy’ (intr) B

ssn

tasusna ‘wasp’s nest’ B

stɛżb

steczeḇ / isteczeḇ ‘to astonished’ (intr) A PP msteczeḇ / msteczeḇa / msteczeḇin

E.g. msteczeḇ gas ‘He is astonished by him.’

stf

asettuf - isettufen ‘type of plant’ B

stl

stilu - stiluwaṯ ~ stilus ‘pen’ A/S
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<td>stanes / istanes ‘to get used’ (trans) A PP mestanes / mestansa / mestansin</td>
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<td>stnydr</td>
<td>sstenyaḍur - sstenyaḍuris ‘screwdriver’ A/S</td>
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<td>str</td>
<td>asat - isat Dim. aswiter - iswiter F. tasaturt - tisaturt Dim. taswiter - tiswitr</td>
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<td>stry</td>
<td>lastreyya - lastreyyaṭ ‘rake’ A</td>
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<tr>
<td>stṭḥ</td>
<td>aṣettuḥ - ḡuṣṭṭuhen ‘firewood’ B</td>
</tr>
<tr>
<td>sw</td>
<td>iswa ‘to cost’ (intr) A (Only imperfective)</td>
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<tr>
<td>swl</td>
<td>siwel / sawel / tsawal ‘to speak or talk’ (intr) B The verb can be followed by the indirect object and/or the preposition i ~ id. E.g. uhad isawl as id uɛeyyal aḍ or uhad isawel id uɛeyyal aḍ ‘This person has spoken to this boy.’</td>
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<td>swn</td>
<td>asawen F. tasawent ‘upwards hill’ B</td>
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<td>swq</td>
<td>sewweq / sewweq / tsewwaq ‘to shop, go to the market’ (intr) B PP msewweq / msewwqa / msewwqin</td>
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<tr>
<td>sxn</td>
<td>sxxana ‘fever, summer’ A</td>
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<tr>
<td>sy</td>
<td>seyya ‘moving backwards in a boat’ A</td>
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<td>sy</td>
<td>sseyyu - sseyyus ‘postage stamp’ A/S</td>
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<td>syb</td>
<td>seyyeb / seyyeb / tseyyaḥ ‘to throw’ (trans) B Pass tseyyebet PP mseyyeb / mseyyebat / mseyyhit</td>
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<td>syd</td>
<td>sseyyed - sseyyedet ‘marabout’ A</td>
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<td>syf</td>
<td>ssayf - ssuṣef Dim. ssweyyef - sswiṭat ‘sword’ A</td>
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<td>syl</td>
<td>seyyel / sseyyel / tseyyal ‘to flow’ (intr) B PP tseyyelat PP mseyyel / mseyyelat / mseyyot</td>
</tr>
<tr>
<td>sžd</td>
<td>sżed / isżed ‘to bend on the forehead for prayer’ (intr) A AP sażed / sażda / sażdaṭ PP mesžud / mesžuda / mesžudin</td>
</tr>
<tr>
<td>sže</td>
<td>ssžeza - ssžeṣat ‘bravery’ A</td>
</tr>
<tr>
<td>sžn</td>
<td>lmesžun - lemṣasen ‘captive or prisoner’ A</td>
</tr>
<tr>
<td>sžn</td>
<td>sisžen ‘prison’ A</td>
</tr>
<tr>
<td>sžn</td>
<td>sžen / sžen / sežžen ‘to detain’ (trans) B Pass tsežṇet PP mesžun / mesežuna / mesžunin</td>
</tr>
<tr>
<td>sʕl</td>
<td>ssuʕal - ssuʕalat ‘question’ A</td>
</tr>
<tr>
<td>ṣ</td>
<td>ṣṣf</td>
</tr>
<tr>
<td>ṣṣf</td>
<td>tisiṣaf ‘saliva’ B</td>
</tr>
<tr>
<td>ṣṣṭl</td>
<td>ṣṣṭal - ṣṭula Dim. tasṭeyyel - tisṭila ‘bucket’ C</td>
</tr>
<tr>
<td>ṣb</td>
<td>ṣṣaḇa - ṣṣyeḇ ‘harvest’ A</td>
</tr>
<tr>
<td>ṣbn</td>
<td>ṣeṣben / ṣeṣben / tseḥben ‘to wash clothes’ (trans) B Pass tseḥbenet PP mṣebbenn / mṣebbenn / mṣebbennin E.g. daʔimen ka-tṣeḥben g lḥedd ‘It is always washed on Sunday.’</td>
</tr>
</tbody>
</table>
šbn  ṣṣabun Unity F. ṣṣabuna ‘soap’ A
šbṭ  ṣṣebbat - ṣṣabbat Dim. šibta - šibbat Unity F. ṣṣebbat Dim. tašbibet
- tišbibat Augm. ašebbat Dim. ašibat - išbibat ‘shoe’ B
šd  ṣṣad / išsad ‘to hunt, to fish’ (trans) A E.g. atqam a d ṣṣad ‘He fished yesterday.’
šde  ṣedde / seđde / tseđde ‘to make loud noise, disturb’ (trans) B Pass tseđdeet
PP mṣedde / mṣeddeka / mṣeddekin VN ssđae ‘noise’ E.g. lmuṭee an mṣedde ‘That place is noisy.’
šf  ṣeffi / ṣeffi / tseffay ‘to clear, filter’ (trans) B PP mṣeffi / mṣeffya / mṣeffin
šf  AP ṣafi / ṣafya / ṣafin ‘filtered, cleaned’
šf  ṣeff / ṣeff / tseffa ‘to empty, dispose’ (lab) B E.g. ikas ad iseff ‘This glass has been emptied.’
šfšf  ṣṣefṣaf Unity F. ṣṭefṣaf - tišeṣṣafan ‘type of tree’ C
šfš  ṣṣeffiha - ṣṣayyeḥ ‘hoof’
šfr  ṣṣefraw - ṣṣefrawen Dim. ṣṣeffer - ṣṣifren F. ṣṭefrawt - tišeṇat Dimension. ṣṭifert
- tiṣṣifra / ṣṣifra / ṣṣṣifra ‘yellow person/thing’ B
šfr  ṣṣeffar / ṣṣeffar / tseffar ‘to whistle’ (intr) B VN tesfisfr
šfr  ṣṣer / ṣṣer / ṣṣer ‘yellow’ Dim. ṣṣifera / ṣṣifera / ṣṣifera ‘somewhat yellow’ A
šfš  ṣṭef - ṣṭeften ‘torch’ B
šhd  ṣṣehd ‘warmth’ A
šh  ṣḥu / ṣḥa / ṣṣu ‘to get well’ (intr) B
šh  ṣḥu / ṣḥa / ṣṣu ‘to be strong, to be cured, to be correct’ (intr) B
šl  ṣlaṣel ‘origins’ A
šl  ṣṣala / ṣṣla ‘prayer’ A
šlb  ṣṣalaḥa - ṣṣalaḥaris ‘type of fyke’ A/S
šle  ṣṣellic - ṣṭellicen ‘forehead’ Arabic ṣṣellica is used as well in texts. B
šlt  ṣṣalṭu / ṣṭalṭus ‘jump (in the water)’ A/S
šlt  ṣṭalṭa / ṣṭalṭa ‘to dive’ (intr) A
šltgm  ṣṭelatγam ‘day before yesterday’ B
šm  ṣṣum / ṣam ~ ṣṣum / ṣṭsum ‘to fast’ (intr) B AP ṣayem / ṣayma / ṣaymin tr. only
- in ṣam ṛṛemdan ‘He fasted the ramadan.’
šmk  ṣmeṣk / ṣmeṣk-a / ṣmeṣk ‘deaf’ A
šmr  ṣmeṣmar ~ ṣmeṣmar - ṣmeṣmar Dim. ṣmeṣmer - ṣmeṣmeren ‘nail’ C
šmt  ṣṭemmet / ṣṭemmet / ṣṭemmet ‘to wrap something, to bring animals (goats) back home’ (trans) B
šmt  ṣṣmaṭa - ṣṣmaṭa Dim. ṣṣmaṭa - ṣṣmaṭa ‘leather belt’ A
šmt  ṣṭimmet (ti-) ‘cold’ B
ṣnbṛ - asnuḥer - isnuḥren Dim. asniḥer - isniḥren F. taṣnuḥert - šṣnaḥer Dim. taṣniḥert - tiṣniḥran ‘pine tree’ B
ṣndl - aṣndil - iṣndilen F. taṣndilil ‘forehead’ B
ṣnr - šṣennara - šṣnayer Augm. aṣennarun Dim. šṣniwra - šṣniwraḥ ‘fishhook’ A
ṣnsṭgm - asnuṣelatgam ‘three days ago’ B
ṣṇž - aṣennaz - iṣenniža ‘type of basket’ B
ṣp - šṣappa - šṣappat ‘slash with two teeth’ A
ṣqṣ - šeqṣi / šeqṣa / šeqṣay ‘to ask’ (trans) B PP mšeṣṣi / mšeṣṣya / mšeṣṣin
ṣr - šṣr - leṣwar Dim. šṣweyyer ‘wall without roof’ A
ṣrb - šṣrab ‘alcoholic drink’ A
ṣṛ - šṣuṛ - leṣwaṛ Dim. šṣweyyer ‘wall without roof’ A
ṣṛḥ - lmeṣṛaḥeyya ‘theater’ A
ṣṛnd - šṣaṛanḍa ‘big fyke’ A
ṣṛmnt - šṣaṛmuniti ‘red mullet’ S
ṣṛq - Pass tṣerqet PP mšeṣṣuq / mšeṣṣqa / mšeṣṣquin ‘to steal’ see kr ‘to steal’
ṣrq - šṣerwel / šṣerwel / tšeṣwel ‘to put on trousers’ (trans) B Pass tṣerwelat PP mṣerwel / mṣerwela / mṣerwelin tṣerwelat taceyyalt ahen ‘That girl has got trousers.’
ṣṛŕ - šṣsr – šṣsrayer ‘secret’ E.g. ma iteawad ši šṣsrayer nnes ‘He does not tell his secrets.’ A
ṣṭ - šṭ / šat / šṭu ‘to blow’ (intr) B E.g. šrwaḥ šṭu ‘the wind is blowing’
ṣṭ - šṭamṣeṭṭ - timesṭan augm. amṣeṭ - imeṣṭen ‘thigh’ B
ṣṭb - aṣṭṭiḥ - iṣṭṭiḥen Dim. aṣṭṭeḥ - iṣṭṭeḥen F. taṣṭṭeḥet - tiṣṭṭeḥan Dim. taṣṭṭeḥet - tiṣṭṭeḥan ‘bush’ B
ṣṭḥ - aṣṭṭuḥ - iṣṭṭuḥen ‘stick’ B
ṣṭḥ - aṣṭiḥ - iṣṭiḥen Dim. aṣṭiyeḥ - iṣṭeḥen Dim. F. taṣṭeḥet ‘roof’ B
ṣwṭ - šewweṭ / šewweṭ / tṣewwaṭ ‘to be emaciated, to vote’ (intr) B Pass tṣewwetet PP mṣewweṭ / mṣewweṭa / mṣewwetin
ṣwṭ - šṣawṭ ‘voice’ A
ṣyd - šcyyeḍ̱ / šcyyeḍ̱ / tṣeyyaḍ̱ ‘to seduce’ (trans) B Pass tṣeyyḍ̱et PP mṣeyyeḍ̱ / mṣeyyḍ̱a / mṣeyyḍ̱in
ṣym - AP šayem / šayma / šaymin ‘to fast’ see źm and šm ‘to fast’
ṣyṭ - aṣyṭ - isyaten Dim. aṣwweyyet - iṣwweyyet ‘border in a meadow’ B
š - ši E.g. ši n medden ‘some people’ A
š - šš / šš / źtt ‘to eat’ (trans) B cf. wkl for AP
ššk - taṣṭaṣēk - tiṣṭaṣēk ~ ššwaṣ Dim. taṣṭaṣēk - tiṣṭaṣēk ‘hat’ B
ššy - taṣṭaṣayt n ụṭař - tiṣṭaṣayt n ụṭař ‘instep (of the foot)’ B
šbh - - / - / tṣabah ‘to look like’ (trans) B E.g. štšabah g yan ši ‘He looks like someone.’ Always combined with the preposition g.
šbk  ššebkā - ššebkāt ~ ššbuk Dim. ššbiška - ššbiškaš ‘fine long net’ (It is used for catching fish like sardines, used on the beach.) A

šbr  šebber / šebber / tšebber ‘to catch, hold’ (trans) B Pass tšebbret PP mšebber / mšebbreta / mšebbretin VN ttešbira - ttešbiraš

šbšt  šebbet / šebbeth / tšebbeth ‘to climb’ (intr) B PP mšebbet / mšebbetha / mšebbethin

šby  ašbayyu ‘rope to tie the plough to’ B

šd  šedd / šedd / tšedd ‘to catch, hold’ (trans) B Pass tšebbret PP mšebbeṛ / mšebbreta / mšebbretin VN ītešbiṛa p ītešbiṛaṯ

šbšt  šebbeṭ / šebbeth / tšebbath ‘to climb’ (intr) B PP mšebbeṛ / mšebbreta / mšebbretin VN ītešbiṛa p ītešbiṛaṯ

šby  ašbayyu ‘rope to tie the plough to’ B

šd  šedd / šedd / tšedd ‘to tie’ (trans) B Pass tšeddeṯ PP mšeddeṯ / mšeddeṯa / mšeddeṯin E.g. nettaṯa tešedel ayrum ‘She baked bread.’

šel  šal ‘how many’ A

šel  tašṣeṭ / tišṭaḥ ‘big earring’ B

šer  šašer / šišer ‘poet’ A

šer  ššar / ššer ‘hair’ Unity aššerun - iššerunen Dim. aššaren - iššeraren ‘one hair’ B

šer  ššašer / ššišer ‘fishing line’ A

šf  ššeffa / ššefayef ‘lip’ A

šfr  ššeffar / ššeffara Dim. ššifser / ššifšrin Dim. ššifšra ‘thief’ A

šfr  ššifser - ššifšrin ~ šešfar ‘eyelid’ A

šhd  šašheḏ / šašhuḏ ~ ššahuḏ ‘witness, martyr’ A

šhd  šed / šed ‘to testify’ (trans) A AP

šhd  lemšed / lešmašed Dim. lemššed ‘tombstone’ A

šhr  ššer / ššhura ‘month’ Dim. ššheṭ ‘month’ (The diminutive means that the month went by quickly.) A

šk  bušuḵ ‘nailed fence’ A

šk  šekk / šukk / išekk / išukk ‘to doubt’ (intr) A PP meškak / meškaka / meškakin E.g. šekku gas ‘They doubted him.’

šk  ška / iški ‘to complaint about’ (trans) A E.g. ška xfi ‘ He complained about me.’

šk  ššekk / ššukk ‘doubt’ A

škl  šškal - leškula ‘rope to tie a donkey’

škm  leškama / leškamaṯ ‘fish scale’ A

škm  ššekkem / ššekkem / tšekkem ‘to squeal’ (trans) B Pass tšekkemet PP mšekkem / mšekkem / mšekkemin VN tteškim It can take the preposition g or a Direct Object pronoun.

škm  ššekkem - ššekkama Dim. ššikem / ššikem / ššikemat Dim. ššikma ‘traitor’ A
škr
šekker / šekker / tšekker ‘to lift’ (trans) B Pass tšekkret PP mšekker / mšekkra / mšekkrin

škr
šker / išker ‘to praise’ (trans) A Pass tšekket PP meškur / meškura / meškurin

škṛ
šškara Dim. taškeyyert ~ šškiwra - tiškiran Augm. ašekrun ‘bag’ C

šlgm
ašelgm - išelgumen ~ ššlagem Dim. ašligem - išligmen F. tašelgumt - tišelguman
Dim. tašligemt - tišligman ‘lip’ B

šlym
ššlayem ‘moustache’ E.g. bušlayem ‘man with a moustache’ A

šll
šellel / šellel / tšellel ‘to rinse’ (trans) B

šlq
ašeqqa / išeqqa ~ ššeqqa ‘old clothes’

šlx
asallax - išallaxen F. tašallaxt - tišallaxan ‘big variant of something’ B

šm
lušam - lušamaṭ ‘tattoo’ A

šm
ššmeṣa - išemma ‘to smell’ (trans) B

šme
ššmeṣa - źšmeṣeṣa - ššmeṣeyyaṭ Augm. ašmeṣen ‘candle’ A

šml
ššmal ‘north’ A

šmm
ššemman F. tašemmant - tišemman ‘small ant’ A

šmr
ššmender Dim. ššminder ‘sugar beet’ A

šmr
ššmender Dim. ššmender ‘sugar beet’ A

šmr
ššmender Dim. ššmender ‘sugar beet’ A

šnd
ššnd - lešnayt ‘plough tie’ A

šnq
ašennaq - išennaqen Dim. ašnineq - išnineqen ‘bundle of grass’ B

špṛ
ššpiṭ - iššpiṭen Dim. tašpiṭt - tišpiṭan ‘bump’ (E.g. from insect bite) B

šq
ššeqqa - ššeqqa ‘cut’ A

šq
ššaqqet - iššaqqen ‘shard of earthenware’ B

šrq
ašeqqet - išeqqen ‘snail shell’ B

šrq
ššeqqa / ššeqqa ‘pipe’ A

šqr
ašaqaṭ - išuqaṭ Dim. ašwiqaṭ - išwiqaṭen F. tašqaṭt - tišqaṭran Dim.
tašwiqet - tišwiqan ‘axe’ B

šqr
ššeqqa / ššeqqa / tšeqqa ‘to chop’ (trans) B Pass tšeqqet PP mšeqqa / mšeqqar / mšeqqrin

šr
Pass tešraṭ PP mešri / mešreyya / mešreyyn ‘to buy’ cf. sɣ ‘to buy’

šrk
tašrikt - tišrikan ‘stepmother’ B

šrl
ššral ‘jack fish’

šrq
ššreqqet / išreqqet ‘to come from the east’ (trans) A E.g. šeqqat tařuṭt ‘The sun came up from the east.’
šrb  mešruḇa - mešruḇat 'drink' A
šrb  šerreb / šerreb / tšerreb 'to give water' (trans) B
šrb  ššurba Dim. ššriba 'soup' A
šřf  šerref / šerref / tšerref 'to make old' (trans) B See wsr for non-causative.
šṛḥ  šreh / šreh 'to explain' (trans) A PP mešruḥ / mešruḥa / mešruḥin
šrq  ššerq 'east' A
šrq  ššerqī 'hard wind, high waves from the east' A
šṛf  PP mešrар / mešrara / mešrarin 'to fight, to argue' B cf. kns
šṛt  ašṣeret ~ ašṣerut - iṣṣereten ~ iṣṣereten Dim. ašṣeret - iṣṣereten F. tašṣeret - tišṣeretan
Dim. tašṣeret - tišṣeretan 'line' B
šrwṭ  ašṣerwīt ~ iṣṣerwīt 'piece of string' B
št  ššita 'brush' A
štf  Pass tšetṭfet PP mšettetf / mšettetfī 'to dry' see k 'to dry' for base verb
štw  ššetwa 'winter' A
šty  ašṣetay - iṣṣetayen F. tašṣetayt - tišṣetayan 'big bundle of hair' B
šṭb  šetṭeb / šetṭeb / tšetṭetb 'to sweep' (trans) B Pass tšetṭeb PP mšetṭeb / mšetṭba / mšetṭīn E.g. axyam ahen mšetṭeb 'That room is wiped.'
šṭb  tašṣetṭabt - tišṣetṭabtan 'broom' B
šṭh  šeteh / šteh / šetṭeh 'to dance' (intr) B VN ššith Caus šetṭeh / šetṭeh / tšetṭetb 'to make dance' (trans) B šetṭhax t byeddi 'I made him dance myself.'
šṭn  ššiṭan - ššiṭetn ~ ššayatīn 'satan' A
šṭr  šṭar / išṭar 'to ruminate' (trans) A E.g. ḫaṣa a ma ka-tšṭar ši ḫrama 'The thing that does not ruminate is haram.'
šṭyṛ  šṭaryī - šṭaryeyīn F. šṭaryīya 'stingy' A
šwl  ašewwal - išewwila 'penis' B
šwṭ  šewwet / šewwet / tšewwet 'to grill' (trans) B
šwṭ  šewwet / šewwet / tšewwet 'to roast, fry' (trans) B Pass tšewwet PP mšewwet / mšewweta / mšewwetīn B
šxṛ  šxer / išxer 'to snore' (intr) A
šy  tašṣyīt 'small handmill' B
štn  ššiṭun 'anchovy' A

T

tbe  tbe / iṭbe 'to follow' (trans) A
tbe  ttabe 'part of the plough' A
tbl  ttabl - ttablī Dim. ttablā - ttablīyīt 'table' A
tbn  aṭebban - iṭebban Dim. aṭibben - iṭibben Dim. taṭibbent - tṭibbīn 'trousers' B
tebbet / tebba / ttebbët ‘to recognize, to focus, to be aware’ (trans) B Pass
ttebbët PP mtebbeţ / mtebbeta / mtebbëţin E.g. immûţ mtebbeţ ‘He died being aware of what happened.’

tiḥurun ‘shark’ S

tidda (ti-) - tiddīwan (ti-) ‘leeche’ B
ttelelem - ttelelem Dim. tteilem F. tteilma Dim. tteilma ‘fox’ A

tfa / itfa ‘to yawn’ (intr) A

tteffah Unity F. tateffah - titeffahan Augm. ateffah ‘apple’ C

Lmutahim - Lmutahimin ‘defendant’ A

them / ithem ‘to suspect’ (trans) A PP methum / methuma / methumin VN

ttuhma

tehher / tehher / ttehhar ‘to circumsice’ (trans) B Pass ttehher PP mtehher / mtehhrin

tthur / tthur / tthur ‘to crawl’ (intr) B E.g. ag ill ithur ‘He was crawling.’
tekki / tekki ~ tekka / tekkay ‘to press on’ (intr) B

tukka ‘zipper’ A

Tilbzyun - Tilbzyunat ‘television’ A

PP metluf / metlufa / metlufin ‘to be lost’ cf. wšk ‘to be lost’

telfaza - telfazaţ ‘television’ A

Atellis - Atellisen ‘thick wool cloth’ B

taleţ - talţin F. talţa ‘third’ A

tlaţa ‘tuesday’ A

Ttaman - Tkatmina ‘price’ A

Aţmun - Iţmunen Dim. Aţmweyen Dim. Taţmweyent ‘haystack’ B

ttani - Ttanya F. ttanya ‘second’ A

Tunubir ~ Tunubil - Tunubirat ‘car’ A

Itenešen ‘money’ (Based on rifian ţinešin ‘money’. Only locally used in the village.) B

Leţnin ‘monday’ A

Tunturira ‘blue shark’

Taq / Itiq ‘to trust’ (trans) A E.g ka-ytiq iđes ‘He trusts him.’

Lmetqeb - Lemtqeb Dim. Lemqeb - Lemqebat ‘awl’ A

Tqeb / Tqeb / Tqub ‘to pierce, make a hole’ (trans) B Pass tteqbeţ PP metquţ / metquţa / metquţin

Tqil ‘heavy’ A

Tqil ‘type of bird’ (resembles a pigeon) B

Ttru / Ttru / Ttru ‘to cry’ (intr) B Caus ssetru / ssetra ~ ssetru / ssetraw ‘to make cry’ (trans) B See bk for alternative Caus and PP E.g. hav ittru ‘He is crying.’
That boy is crying, I do not know who made him cry.'
ṭem - ṭtemat Dim. ṭtemayem - ṭtemimat 'bait' A
ṭf - ṭaf - ṭafen 'stalk' B
ṭf - PP metfi / metfeyya / metfiyyin 'extinguish' E.g. leafya metfeyya 'the fire is extinguished' B cf. ns 'to extinguish'
ṭf - ṭtef / ṭtefi / ṭteffet 'to hold' (trans) B
ṭfr - ṭfrayfur - ṭfrwafer Dim. ṭfrwifer - ṭfrwifraṭ 'low wooden table' A
tgd - aṭuḡd - ituḡdan 'finger' B
Names of the individual fingers are:
khel ssḥaḥ ~ khel aṭaḍḥ 'middle finger' A
leḥḥas lemṛaq ~ leḥḥas ṭṭwaẓen 'index finger' A
mul ḵuẓ n lexwaṯem 'ring finger' A
stitu mezyan 'little finger' A
ṭgm - aṭḡam (wa-) 'yesterday' B
ṭḥk - ṭḥheḵ / ṭḥheḵ / ṭṭeḥḥaḵ 'to make laugh' (trans) B Pass ṭṭeḥḥḵeṯ PP mṭeḥḥeḵ / mṭeḥḥḵa / mṭeḥḥḵin see ḩs 'to laugh'
ṭḥk - ṭṭaḥk 'laughter'
ṭḥn - ṭṭahuna - ṭṭwaḥen 'electric mill' A
ṭṭn - ṭṭṭin 'flour' A
ṭḥr - ṭḥher / ṭḥher / ṭṭeḥḥar 'to circumcise' (trans) B PP mṭeḥḥer / mṭeḥḥra / mṭeḥḥrin E.g. Ḫ a ṭṭrāx aḥeyyaḥ īnu 'I am going to circumcise my child.'
ṭḥr - ṭṭher - ṭṭḥura Dim. ṭṭḥeyyer 'back' A
ṭḥr - ṭṭḥara - ṭṭḥaraṭ 'circumcision' A
ṭl - ṭal (wa-) 'grape' taquqet n waṭil 'one grape' B
ṭl - ṭtal / ṭṭal 'to guess' (intr) A Pass ṭṭalṭe PP meṭṭal / meṭṭala / meṭṭalṭin
ṭlb - ṭleb / ṭṭleb 'to request, to ask for, to order' (intr) A PP meṭluḥ / meṭluḥa / meṭluḥin E.g. ṭeḥt ṭlwā 'I ordered from him.'
ṭlb - ṭṭalṭe - ṭṭulbā ~ ṭṭulbā Dim. ṭṭwileb 'pupil in Koran school' A
ṭlę - ṭalec 'up' Adv ḩar ṭalec 'to up there' A
ṭlḥ - ḵteliḥ - ḩtelihen 'forehead' B
ṭll - ṭṭeql / ṭteql / ṭṭeql 'to peek' (intr) B E.g. ṭṭeql fḵes 'He peeked at him.' B
ṭlq - ṭṭeql / ṭṭeql / ṭṭeql 'to divorce' (trans) B PP meṭluq / meṭluqa / meṭluqin
ṭlq - ṭṭeql / ṭṭeql / ṭṭeql 'to straight, straighten, to let go' (trans) B Pass ṭṭeqlṭe PP meṭluq / meṭluqa / meṭluqin
ṭlq - ṭṭeql 'divorce' A
ṭme - ṭemme / ṭemme c 'to lure, to entice' (intr) A Pass ṭemmeṭ PP mṭemme / mṭemmea / mṭemmein
ṭme - ṭemme / ṭemme / ṭṭemmac 'to aspire' (trans) B
ṭmr  
/ṭmr /ṭmr /ṭṭmur ‘to bury’ (trans) B E.g. š a neṭmer yan iši ‘We are going to bury someone.’

ṭmr  
atemmar - ṭemmaran ~ ṭemmira ‘hole’ B

ṭmr  
ṭṭmar Unity F. taṭmar - taṭmaran ‘leg, foot’ B

ṭq  
ṭṭaqqa /ṭṭaqqa /ṭṭiqqan ‘hole’ B

ṭq  
ṭṭwiqa /ṭṭwiqa /ṭṭwiqaṯ ‘small window’ A

ṭql  
ṭeqqel /ṭeqqel /tṭeqqal ‘to heavy’ (trans) B Pass ṭṭqaleṯ

ṭṛ  
aṭaṛ /aṭaṛ /ṭṭaṛt ‘leg, foot’ B

ṭṇr  
aṭemmar /ṭmer /ṭṭmer ‘to fart hard’ (intr) B

ṭṣ  
ṭṭaṣ /ṭṭaṣ /ṭṭaṣa ‘toiletpot’ A

ṭṭaṣa /ṭṭaṣa /ṭṭiṣan ‘bowl, glass’ A

ṭṭaṣ /ṭṭaṣ /ṭṭiṣan ‘toiletpot’ A

ṭṭweṛ /ṭewweṛ /ṭewweṛ ‘to let, make develop’ (trans) B Pass ṭṭewwṛeṯ PP mṭewweṛ /mṭewweṛa /mṭewweṛin

ṭṭawpa /ṭṭawpa /ṭṭawpaṯ ‘rat’ A

ṭṭawpaṯ ‘toilet’ A

ṭṭiṣan ‘bowl, glass’ A

ṭṭiṣan /ṭṭiṣan /ṭṭwiṣa ‘bowl, glass’ A

ṭṭwiṣa /ṭṭwiṣa /ṭṭwiṣaṯ ‘toilet’ A

ṭṭwiṣaṯ /ṭṭwiṣaṯ /ṭṭwiṣaṯ ‘toilet’ A

ṭṭwiṣaṯ ‘toilet’ A

ṭṭwiṣaṯ /ṭṭwiṣaṯ /ṭṭwiṣaṯ ‘toilet’ A

ṭṭwiṣaṯ ‘toilet’ A

ṭṭwiṣaṯ /ṭṭwiṣaṯ /ṭṭwiṣaṯ ‘toilet’ A

ṭṭwiṣaṯ ‘toilet’ A

ṭṭwiṣaṯ /ṭṭwiṣaṯ /ṭṭwiṣaṯ ‘toilet’ A

ṭṭwiṣaṯ ‘toilet’ A

ṭṭwiṣaṯ /ṭṭwiṣaṯ /ṭṭwiṣaṯ ‘toilet’ A

ṭṭwiṣaṯ ‘toilet’ A

ṭṭwiṣaṯ /ṭṭwiṣaṯ /ṭṭwiṣaṯ ‘toilet’ A

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ṭṭwiṣaṯ /ṭṭwiṣaṯ /ṭṭwiṣaṯ ‘toilet’ A

ṭṭwiṣaṯ ‘toilet’ A

ṭṭwiṣaṯ /ṭṭwiṣaṯ /ṭṭwiṣaṯ ‘toilet’ A

ṭṭwiṣaṯ ‘toilet’ A

ṭṭwiṣaṯ /ṭṭwiṣaṯ /ṭṭwiṣaṯ ‘toilet’ A

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ṭṭwiṣaṯ ‘toilet’ A

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ṭṭwiṣaṯ ‘toilet’ A

ṭṭwiṣaṯ /ṭṭwiṣaṯ /ṭṭwiṣaṯ ‘toilet’ A

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ṭṭwiṣaṯ ‘toilet’ A

ṭṭwiṣaṯ /ṭṭwiṣaṯ /ṭṭwiṣaṯ ‘toilet’ A

ṭṭwiṣaṯ ‘toilet’ A

ṭṭwiṣaṯ /ṭṭwiṣaṯ /ṭṭwiṣaṯ ‘toilet’ A

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ṭṭwiṣaṯ /ṭṭwiṣaṯ /ṭṭwiṣaṯ ‘toilet’ A

ṭṭwiṣaṯ ‘toilet’ A

ṭṭwiṣaṯ /ṭṭwiṣaṯ /ṭṭwiṣaṯ ‘toilet’ A

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ṭṭwiṣaṯ /ṭṭwiṣaṯ /ṭṭwiṣaṯ ‘toilet’ A

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ṭṭwiṣaṯ /ṭṭwiṣaṯ /ṭṭwiṣaṯ ‘toilet’ A

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ṭṭwiṣaṯ /ṭṭwiṣaṯ /ṭṭwiṣaṯ ‘toilet’ A

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ṭṭwiṣaṯ /ṭṭwiṣaṯ /ṭṭwiṣaṯ ‘toilet’ A

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ṭṭwiṣaṯ ‘toilet’ A

ṭṭwiṣaṯ /ṭṭwiṣaṯ /ṭṭwiṣaṯ ‘toilet’ A

ṭṭwiṣaṯ ‘toilet’ A

ṭṭwiṣaṯ /ṭṭwiṣaṯ /ṭṭwiṣa_dept
wdql  weḏqul ‘nothing’
wğd  weḏ / weḏ / tweḏ ‘to make ready’ (trans) B Pass tweḏet PP mwegaḏ / mwegaḏa / mwegaḏin
we  weexi / weexa / tweexay ‘to make wise’ (trans) B Pass tweexat PP mwexi / mwexya / mwexcin
we  AP waei / warya / wacin ‘be wise’
we’d  waaed / waaed / twaaed ‘to promise’ (intr) B PP mwaaed / mwaeaḏa / mwaeaḏin
VN leahd E.g. fk ay leahd ‘Give me a promise.’
wf  twafalt - tiwfalan Dim. tawfeyyelt - tiwfeyylan Augm. awf / iwfalen ‘egg’ B
wyd  taweyda - tiydiwan ‘part of the plough’ B
wyl  tay’lalt - ty’lalan Dim. tiy’leyyelt - tiy’leyyylan Augm. ay’lal - iy’lalen Dim. ‘pot, pea soup’ B
wh  twaha / itwaha ‘to sigh’ (intr) A
whn  wehhen / wehhen / twehhan ‘to beat up’ (trans) B Pass twehhenet PP mwehhen / mwehha / mwehhan
whš  lwehs ‘animal’ A
wk  tawekt ~ tawukt - tiwektan ‘owl’ B
wkl  AP wakel / wakla / waklin ‘to eat’ cf. š ‘to eat’
wl  - / - / twala ‘to see/to be able to see’ (trans) B (Only an imperfective form.)
wla  wali / wala / twalay ‘to hit’ (trans) B Pass twalat PP mwali / mwalya / mwalin
E.g. ma cat šk a t iwalan ‘I don’t know who hit her.’
wle  twala ‘type of disease’ B
wl  lwald - lwalidin F. lwalida ‘parents, father, mother’ A
wl  lweld ‘good looking young man’ A
wl  lwellaḏa - lwellaḏat ‘womb’ A
wlf  twalef / itwalef ‘to get used’ (trans) A E.g. nekki twaleft fxes ‘I got used to him/her/it.’
wlk  tawlekt - tiwelkan Dim. tawleyyekt ‘gunny sack’ B
wnf  tawnaf - tiwnafan Dim. tawneyeft - tiwniftan ‘bread from the frying pan’ B
wnts  lwanṭis ‘gloves’ (Only a plural form.) A/S
wqe  wqeq / yewqe ‘to happen’ (intr) A E.g. wqeq-lu ši ḥaža ‘something happened to him.’ E.g. daʔimen ka-yewqe ayha ‘This always happens.’
wqf  AP waqef / waqfa / waqfin ‘to stand up’ E.g. ṭṭunuḇir teḇdeḏ waqfa ‘The car stood still.’ cf. bdd ‘to stand up’
wqf  weqqef / weqqef / tweqqaf ‘to stop’ (trans) B Pass tweqqafet PP mweqqef / mweqqfa / mweqqafin
wqf  taweqqaft - tiweqqifa Dim. tawqiqeft - tiwjafan Augm. aweqqaf - iweqqifa ‘door jamb’ B
wqr  weqqa / weqqa / tweqqar ‘to respect’ (trans) B
wr  PP mwerri / mwerrya / mwerrin ‘to show’ see ml ‘to show’
wrđ  lwerđa - lwerđa ‘rose’ A
wrđ  awerd - awerdan ‘louse’ B
wrđ  tawerđa ‘type of disease’ B
wrg  werg / werg / ttarga ‘to dream’ (trans) cf. mnm for VN B
wrś  tawriśt - tiwriśan ‘strainer’ (for flour) B
wrw  awrez - iwerzen ‘heel’ B
wrk  werek / werek / twekkak ‘to lie down’ (lab) B PP mwerrek / mwerrek / mwerrek
wse  wase - wase-a / wase-in ‘wide’ Dim. wsise / wsise-a / wsise-in ‘somewhat wide’ A
wse  wessee / wessee / twessae ‘to widen’ (trans) B Pass twesset PP mweesee / mweesea / mweesin
wsm  lmawsem - lemwasem ‘annual feast’ A
wsm  tawsamt - tiwsaman ‘bundle of grain tied together’ B
wsr  awsir - iwseran ‘leaf of the dwarf fan palm’
wsr  wser / wsir / tussir ‘to age, become old’ (intr) B E.g. ibda ittewsir ‘He is becoming old.’ For caus. cf. šrf for Caus.
wsx  wessex / wessex / twessax ‘to make dirty’ (trans) B Pass twessset PP mwessex / mwessxa / mwessxin
wšk  wešk / wešk / ttaška ‘to get lost’ (intr) B cf. tlf for PP E.g. tweešk ay lmagana ‘I lost my watch.’ Qqmmax mettu ‘I stayed lost.’ Caus ššwešk / ššušk ~ išwešk ~ iššašk / ššwešk ‘to make lose, to make disappear’
wt  wevėt / wevet / kkat ~ itkat ‘to strike, hit, shoot’ (trans) B see ḏrb for Pass and PP ḏvet s leklaţa ‘he has shot with his rifle.’
wtn  lmuuwatţin - lmuuwatţinin F. lmuuwatţina ‘citizen’ A
wtn  lwţan ‘native country’ A
wxt  lwext - lwawqat ‘time’ (The plural is a borrowing from Standard Arabic) A
wze  wessee / wessee / twessee ‘to divide’ (trans) B Pass twesseţ PP mwesssee / mwesssa / mwessxin
wzn  lwzzan - lwzzana ‘weigher’ A
wzn  wzen / iwzen ‘to weigh’ (trans) A Pass tweznet PP mewzun / mewzuna / mewzumin
wzr  awezzar - iwezzira ~ iwezzaran ‘open spot in a field which is not ploughed’ B
wzr  lwazir - lwazařa F. lwazira ‘president’ A
**wžd**  *wžed / iwžed* ‘to prepare, to be ready’ (intr) A AP *wažed / wažda / waždin* PP *mewžud / mewžuda / mewžudin*

**wžř** *lwežra* ‘wage’ A

**wzr** *wezzer / wezzer / twezzar* ‘to not plough the land well’ (trans) B Pass *twezzer* PP *mwezzra / mwezzrin* E.g. *tarhebt an mwezzra* ‘That land has not been ploughed well (It has many open spots.).’

**x**

**xbe**  *xebbee / xebbee / txebbæ* ‘to hide, preserve’ (lab) B Pass *txebbæt* PP *mxebbee / mxebbein*

**xbɛ**  *xebbeɛ / xebbeɛ / txebbæ* ‘hide and seek’ A

**xbř** *xebber / xebber / txebbær* ‘to warn, inform’ (trans) B PP *mxeber / mxebrɪ̂ / mxebrɪ̂n*

**xbř** *xebber / xebber / txebbær* ‘to announce’ (trans) B Pass *txebbæt* PP *mxeber / mxebrɪ̂ / mxebrɪ̂n*

**xbš** *axaḇeš - ixuḇaš* F. *taxaḇešt - tixuḇaš* ‘water jug’ (taxaḇešt n lqellal is made out of a type of soil which looks like glass. This a water jug which is put on the road for people who pass by to drink from in order to receive *ṛṛaḥma* ‘forgiveness’)

**xbṭ**  *xebbet / xebbet / txebbæt* ‘to trot (by animals)’ (intr) B

**xbz**  *lxubza* ‘one bread’ Augm. *axubbaz* ‘one big bread’

**xd**  *lemxedda - lemxyedda ~ lemxeddat* Dim. *lemxida - lemxdat* ‘pillow’ A

**xdm**  *xdem / xdem / xeddem* ‘to work’ (trans) B Pass *txedmæt - nxedmæt* AP *xeddama / xeddamin* PP *mxedum / mxeduma / mxedumin* E.g. *nxedmæt x ufus* ‘It is made by hand.’ B

**xdm**  *axeddam - lxeddama* F. *taxeddamt - tixeddaman* ‘servant, worker’ (the form *tanexdamt* is used only in a fairy tale.) C

**xdm**  *lxidma - lexḏayem* Dim. *lexdimæ - lxdimæt* ‘work’ A

**xdm**  *taxaḏemt - txuḏam* Dim. *taxwiḏemt - txiḏman* ‘ring’ B

**xḍṛ**  *axedraw - ixedrawen* Dim. *axdiḍrær - ixdiḍṛæren* F. *taxedrawt - tixedrawan* Dim. *txidiḍær - tixiḍræran* ‘green one’ B

**xḍṛ**  *lxuḍra - lexḏaři* Dim. *lexḏira* ‘vegetables’ A

**xḍṛ**  *xḍær / xedær-a / xuder* ‘green, raw’ Dim. *xḍær / xiḍär-a / xḍær-in* ‘somewhat green’ A

**xff**  *lexfif Dim. lexfeyyef* - *lexfifat* ‘lead’ A

**xff**  *xejfell / xejfell / txeffaf* ‘to light’ (trans) B Pass *txeffet*  

**xff**  *xfif / xif-a / xif-in* ‘light’ A

**xl**  *lexla - lexlawi* ‘wilderness’ A
xle  xellee / xellee / txelleae ‘to preserve food’ (trans) B PP mxellee / mxellea / mxellein
xlq  xleq / xleq / xelleq ‘to be born’ (intr) B
xlṣ xelles / xelles / txellaṣ ‘to pay’ (trans) B Pass txelles PPmxelles / mxellṣa / mxellṣin
xlt  xalti - xaltiwaṯ ‘mother’s sister’ A
xml ttxamel ‘colored scarf women put on their head’ A
xml xemmel / xemmel / txemmal ‘to clean’ (trans) B PP mxemmel / mxemmila / mxemmlin
xmm xemmem / xemmem / txemmam ‘to think of problems’ (intr) B
xml lexmar ‘wine’ A
xml axemmas - ixemmasen F. taxemmast - tixemmasan ‘slave, servant worker’ B
xml lexmis ‘thursday’ A
xml taxna ‘ass’ B
xml taxxnun Augm. axxun - ixxnun ‘ass’ B
xml amexniḥ - imexniḥen F. tamexniḥt - timexniḥan ‘canine tooth’ B
xml xenderf / xenderf / txenderf ‘to drudge’ (trans) B Pass txendfet PP mxenderf / mxendfa / mxendfín
xml lexnafer ‘nose’ taxenfurt - tixenfuran Augm. axenfur - ixenfurun ‘nostrill’ A
xml xneeq / xneeq / xxneeq ‘to sulk’ (trans) B Pass txenqet PP mxenuq / mxenuqa / mxenuqin
xml a"xnaq ~ axnaq - i"xnaqen ~ ixnaqen Dim. axneyyeq - ixneyyqen ‘corridor, passage’ B
xml lexniṣ F. taxniṣṭ ‘plant’ C
xml axennus - ixunnas F. taxennust ‘piglet’ B
xml lxanča - lxančaṯ Augm. axančiw ‘sack’ A
xml axenčuf - lexnačef Dim. axničef F. taxenčuft Dim. taxničef - tixničfan ‘beak’ (pejorative) B
xml axenṭuṭ - ixunṭaṭ F. taxenṭuṭ ‘nasal mucus’ B
xml ttaxer / ittaxer ‘to be last’ (intr) A PP mwexxeṛ / mwexxa / mwexxṛin
xml xerqeb / xerqeb / txerqab ‘to eat wildly’
xrtl lxurtal ‘oats for cattle’ A
xml xerčaf / xerčaf ‘to speak unclearly, to be mixed up’ (intr) B Pass txerčafet PP mxerčaf / mxerčfa / mxerčfin
xml lxrṣi - lexraša ‘sweater’ A
xml lxerraz - lxerraza ‘saddle maker’ A
xml lxurṭa ~ lxurṭa - lxurṭat ~ lxurṭat ‘exit’ A
xml llaxṛi - llaxṛeyyn F. llaxṛeyya ‘last, end’ A
xṛ

xṛa / ixṛa ‘to shit’ (intr) A VN lexṛa
xṛb

lxṛbêtxrêbê Dim. lexṛbêta lexṛbêat ‘ruin’ A
xṛb

lxṛrubułtaxṛrubuł ‘carob bean’ C
xṛf

lexṛf ‘autumn’ A
xṛf

xerref / xerref / txerref ‘to pick fruit’
xṛt

taxrêtit - txerêtitan ‘rag’ B
xṛf

amexṛa - imexṛa A VN lexṛa - lexṛat ‘young rabbit’ B
xṛwț

axerwert - ixerwertan ‘harvest leftover’ B
xṛž

AP xarež / xarža / xaržin ‘to go out’ VN lxaṛža ~ lxaṛžat cf. fy for verb. The following forms are derived from the causative Pass txerżeth PP mxeṛrž / mxeṛržin
xṣ

lixṣa - lxaṣṣat ‘fountain’ A
xṣ

taxṣėst ~ taxṣuṣt - tixṣan ‘tooth - molar’ B
xṣr

xes̱er / ixes̱er ‘to loose’ (trans) A
xṣr

xes̱er / xes̱er / xes̱esser ‘to be broken’ (intr) B
xṣr

xes̱er / xes̱er / xes̱esser ‘to loose’ (intr) B Caus xes̱esser / xes̱esser / txes̱sar ‘to make loose’ (trans) B Pass txes̱seŕ PP mxes̱ser / mxes̱šra / mxes̱šrin
xšb

axes̱ša ‘grass and stalks mixed’ B
xšb

taxšeḇt - txes̱ša(n) Dim. taxšeyyēt - tixšeyyēban Augm. axše̱b - ixes̱ban ‘trap’ (axše̱b is for pigs taxše̱bt for birds and taxšeyyēbt for mice) B
xšm

lexwašem ‘gills’ There is no singular. A
xšn

xes̱ín / xes̱in-a / xes̱ín-in ‘thick’ A
xṭb

xṭeβ / ixṭeβ ‘to preach, to ask for marriage’ (intr) A PP mextuβ / mextuβa / mextuβin
xṭb

xṭeβ / xṭeβ / xetṭeβ ‘to ask to marry’ (trans) B Pass nxetṭeβ PP mextuβ / mextuβa / mextuβin
xṭf

lmuxṭaf - lexuṭaf Dim. lemxiṭef - lexuṭifat ‘anchor’ A
xṭf

lxṭef / xṭef / xetṭef ‘to snatch, grab away’ (trans) B
xṭr

AP xatıfur / xatıfra / xatırin
xṭr

axeṭṭar - ixetṭira ‘trap for birds’ B
xṭr

lxıṭar ‘The fact of picking’ E.g. gas lixṭar ‘He is picky.’ A
xṭr

lxvaṭar ‘danger’ A
xṭr

lxvaṭer - lexwaṭer ‘will’ A
xṭr

xatıfur / xatıfur-a / xatıfr-in ‘dangerous’ A
xṭr

xetṭer / xetṭer / txetṭar ‘to trap’ (trans) B Pass txetṭer PP mxetṭer / mxetṭra / mxetṭrin
xṭr

xṭar / xṭar / ttetṭar ~ ttaxṭar ‘to choose’ (trans) B Pass txetṭar PP mxṭar / mxṭar / mxṭarin

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xč  xiča Unity F. taxacīwt - tixatiwan ‘dried figs’
xty  lexṭeyya - lexṭeyyat ‘fine’ A
xw   lexwa ‘valley’ A
xw   xwa / ixwi ‘to empty’ (intr) A Pass texwat PP mexwi / mexwiyya /mexwiyyin
xw   xwi / xwa ~ xwi / xewwi ‘to empty’ (trans) B There is confusion with the
      Arabic-morphology verb, both are accepted. E.g. argaz ahen ixwa lbaṭil nnes
      aṭgam ‘That man has emptied his boat yesterday.’ ša xwix aman zeg elbaṭil ‘I
      will empty water from the boat.’
xf   lxawf ‘fear’ A
xf   lxewwaf - lxewwafin F. lxewwafa ‘scaredy-cat’ A
xf   xewwef / xewwef / txewwaf ‘to scare’ (trans) B PP mxewwef / mxewwfa /
      mxewwfin
xym  axyam - ixyamen F. taxyamt ‘house’ (A taxyamt is a house consisting of a single
      room.) B
xyṭ  lxayṭ Dim. lexweyyet - lexweyyaṭ ‘thread’ A
xyṭ  lxeyyaṭ - lxeyyaṭa F. lxeyyaṭa ‘tailor’ A
xyṭ  xeyyeṭ / xeyyeṭ / txeyyaṭ ‘to sew’ (trans) B Pass txeyyṭeṭ PP mxeyyeṭ / mxeyyaṭa /
      mxeyyyṭa VN lexyaṭa - lexyaṭaṭ B
xyx  xeyyex / xeyyex / txeyyaṭ ‘to say ‘x’, to express disgust’ (intr) B
xzn  amxazni - lemxazneyya F. tamxazniṭ ‘government agent’ C
xzn  lexzena ‘big tent’ A
xzn  lexzana ‘big tent’ A
y    
yd   ayda - iṭan ‘dog’ E.g. ayda n lebhar - iṭan n lebhar ‘shark’ B
yd   tayda - taydaṭ ‘pine tree, fire tree’ B
yfr  tayeffert - tiyeffaren ‘chain around the neck of cows’ B
yft  ayeffet (wa-) ‘cattle’ Dialectal variant: akfet B
yll  tayllalt ~ tayellalt - tayllalan ‘little butterfly’ (It spoils the harvest.) B
yrn  ayerni ‘arum italicum’ (kind of wild potato) B
yt   tayt - tayṭwan ‘shoulder’ B
yw   ayaw - iywen F. tayawt - tiyawṭan ‘grandchild’ B
ywl  aywel (wa-) ‘rack in the traditional house’ B
ywm  lyawmeyya - lyawmeyyat ‘calender’ A
ywr  aywer (wa-) (no plural) ‘moon’ B
z    
z    
a   izi - izan F. tiziṭ ‘fly’ (tiziṭ is a small fly) B
zž   zzaž - zzižan ‘glass’ A
zbd  zzebda Dim. zzhida ‘butter’ A
<table>
<thead>
<tr>
<th>Term</th>
<th>Meaning and Example(s)</th>
</tr>
</thead>
</table>
| zbg | azebg - izebgan ‘part of the plough’ B  
| zbl | Imsæzbal - lemsæbel Dim. lemsibla - lemsiblat ‘refuse-dump’ A  
| zbl | zebbel / zebel / tzebbal ‘to curse’ (trans) B E.g. izebbel gas ‘He cursed at him/her.’  
| zdyd | lisdiyad ‘birth certificate’ A  
| zdz | azedduz - izedduzen ‘big pounding stick’ B  
| zeb | zzebel - zsebel Dim. zzebla - zseblat ‘leather side bag’ A  
| zef | zecef / zeceff / tzeccaf ‘to reluctantly do something’ (trans) B AP zeefan /  
| zef | zecef ‘reluctance’ A  
| zefrn | zzefern ‘saffron’ A  
| zem | zeem / izem ‘to dare’ (intr) Pass tzemet Caus. ziecem / zeezem / tzeezem ‘to make dare’ PP mzeecem / mzeecema / mzeecemin  
| zem | zieama - zieamaɪ ‘nerve’ A  
| zez | ziezeec / ziezeec / tzizzeec ‘to tremble’ (tr) Pass tzeezem B  
| zf | zzif - zzyufa Dim. zzweyef - zwefin ‘handkerchief’ A  
| zg | aszuq (wa-) ‘wetness’ B  
| zyb | azeybiw - izeybiwen ~ izeybunen ‘a single hair’ B  
| zyl | azyl - izy`alDim. azyeeyel F. tazy`al Dim. tazy`eyel - tisy`illan ‘ladle’ B  
| zgr | azger ‘big bull’ B  
| zgwr | zgawger / No Impf. ‘to squat’ (intr) A PP mezgawger / mezgawgra / mezgawgin  
| zg | szegza ‘type of fish’ A  
| zgsg | szegseg / szegseg / tzegzag ‘to have sex (goats)’ (lab) B PP mzegzeg / mzegzga / mzegzgin  
| zyr | zzuyur / zzayer / zzuyur ‘to pull’ (trans) B  
| zhm | zehhem / zehhem / tsezhem ‘to make bad’ (trans) B PP mzehehem / mzehehma / mzehehmmin  
| zhm | zehhem / zehhem / tsezhem ‘to narrow’ (intr) B PP mzehehem / mzehehma / mzehehmmin VN zizhem  
| zhm | zham / izham ‘to become bad’ (intr) A AP zhim / zhima / zhimin  
| zh | zzhecer Dim. zzheyyer ‘good luck’ A  
| zk | zsekran - zskaren ‘latch’ A  
| zl | azal ‘day, noon’ (Also the time when the goats go back to the stable) B  
| zl | tiselt ‘type of berry’ B  
| zl | tuzzalt - tiwzila Dim. tuizelt - tiwzislan Augm. awzal - iwzila ‘knife’ B  
| zl | tuzzalt ‘type of plant’ B  

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Some younger people know this word, but never use it, žerri ‘to run’ is used instead.

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| zrq | zzriqa ‘wale’ |
| zrz | azrez ‘type of plant with berries’ B |
| zrq | PP mzeṛeq / mzeṛqa / mzeṛqin ‘to close with a key’ |
| zrq | z.rfq / z.rṛeq / z.rirq-a ‘blue’ Dim. zrirq / zrirq-a / zrirq-in ‘somewhat blue’ A |
| zt | zziṯ ‘oil’ (feminine) Types: zziṯ keḥla ‘olive oil’, zziṯ bayṭa ‘cooking oil’ A |
| zwż | zzwaža 9 zzawža ‘pair’ (zzawža is used for cattle, while zzwiža is used for donkeys.) A |
| zwr | zwir / zwir ~ zwar / zuggir ‘to go first’ (intr) B |
| zwy | zrawya - zrawyat ‘islamic monastery’ A |
| zytn | zsaytun Unity F. tazaytun - tizaytun Dim. tazwitent - tizwitnan ‘olive’ B |
| zzw | tazizwa ‘bee’ B |
| z | taẓa (ta-) - taḥiwan (ta-) ‘udder’ B |
| z | ṭṭu / ṭṭa / ṭṭza ‘to plant’ (trans) B cf. ṭṛeq for PP |
| ū | taẓezzit ‘thorns of an ear’ B |
| ū | ṭeq / ṭeq / ṭeq ‘to grind’ (trans) B |
| ẓẓr | taẓeẓẓart ~ taẓzart - tizeẓẓaran ‘kind of bream’ B |
| źbṛ | ṭeẓẓebra - ṭeẓẓebra ‘anvil’ A |
| źeṛ | aẓeɛrwar - izeɛrwa Dim. aẓeɛer - iẓeɛer F. tazecrawt - tizeɛrwan Dim. tazecirt - tizeɛr ‘blond one’ B |
| zg | tazḡa - tizuggan ‘forest’ B |
| zg | ṭeq / ṭeq / ṭeq ‘to milk’ (lab) B Pass thelḥeq E.g. ka teẓeq ka baqi ‘Has she been milked or not?’ |
| zgṣnṭ | aẓgasnet ~ aẓg asnent ~ aẓegʷ sənt ‘last year’ B |
| ṣk | aẓekka - iẓukkan ‘tomb’ B |
| ṣkn | aẓekken - iẓekken Dim. aẓekken - iẓekken ‘kind of plant’ (It grows together with crops) B |
| ẓl | ṭsall ~ ṭsall / ṭsall / ṭsalla ‘to pray’ (trans) B |
| ẓm | taẓemmniṯ ‘crushed barley’ B |
| ẓm | ẓum / ẓum / tazum ‘to fast’ (intr) B See ẓm for AP and alternative. (Used by old people.) E.g. ẓum ẓremdan ‘He fasted the Ramadan.’ |
| ẓmy | aẓmay - iẓmayen ‘kind of plant’ (Used to make rugs) B |
| źnt | aẓenniṯ - iẓenniṯen ~ iẓennat F. tazenniṯ - tizenniṯan ‘tail’ B |
| źr | aẓar - iẓaran Dim. aẓweyyar - izweyyr ‘root’ B |
| źr | aẓru - iẓran ‘stone, rock, battery’ B |
| źr | zer / zər / zər ‘to see’ (trans) B |
| źr | ẓur / ẓar ~ ẓur / tẓur ‘to visit a marabout’ (trans) B |
ẓrb ẓzerb - ləzruḥ Dim. ẓzreyyeh ‘fence’ A
ẓrb ẓzerbeyya - ẓzrab Dim. ẓzribeyya - ẓzribeyyat ‘carpet’ A
ẓre ẓree / ẓree / ẓree ‘to sow’ (trans) B
ẓre ẓzer ‘grain’ A
ẓrh ẓreh / ẓreh / ẓruḥ ‘to injure’ (lab) B Pass tteẓreḥ PP meẓruḥ / meẓruḥa / meẓruḥin E.g. iṣreḥ ssiha ‘He was wounded here.’
ẓrmṭ ẓzermuṭa - ẓzramet ‘lizard with red and white stripes’ A
ẓrwṭ ẓzerwaṭa - ẓzerwaṭaṯ ‘club, stick (for hitting)’ A
ẓry ẓrəyəyə / ẓrəyəyə / ẓrəyəyə ‘hawk’ B
ẓṭ ẓṭiṭi / ẓṭiṭi / ẓṭiṭi ‘a bull with one testicle’ (It doesn’t have a lot of offspring.) A
ẓwb ẓawb ‘sparrow’ A
ẓyg ẓawg / ẓawg / ẓawg ‘twig’
ẓx xax (x) ‘milk’ (no plural) B
ẓyn ẓaynun ‘sign language’ A
ẓyr ẓayyar / ẓeyyar / ẓeyyar ‘to tighten’ (trans) B Pass tẓeyyar PP mzeyyar / mzeyyarin
ž źebbaḏ - ẓebbaḏen ‘part of the plough’ B
žbd ẓebbeḏ / ẓebbeḏ / tẓebbaḏ ‘to stretch’ (trans) B Pass tżebeḥet PP mzbebeḏ / mzbebeḏa / mzbebeḏin
žbr Pass nžebḥaṭ PP mežbuḥ / mežbuḥa / mežbuḥin ‘to find’ cf. f ‘to find’
žd ẓeṭḏa - ẓeṭdiwat ‘grandfather’ A
ždd žḏiḏ / žḏiḏ-a / žḏiḏ-in ‘new’ A
žf ẓəf (wa-)’stench’ E.g. ẓəf n umaleḥ ‘stench of a fish’ B
žf ẓəf / ẓəf / ẓəf ‘to choke’ (intr) B
žl ẓaḷa / ẓala / tẓalay ‘to separate’ (trans) B Pass tẓalaw PP mzali / mzalya / mzalin
žme ẓme - ẓme ‘crowd’ A
žmec ẓmee / ẓmee / ẓmee ‘to gather’ (trans) B Pass tẓemeəṭ PP mezmue / mezmuea / mezmuein
žmr ẓmeṃr - lemžamer Dim. lemžame - lemžimraṯ ‘stove, barbecue’ A
žn ẓni / ẓni ~ ẓηn / ẓηn ‘to pluck’ (trans) B
žṛ ašar - līqiran F. tašart - tišartan ‘neighbour’ C
žrb żeṛeq / żeṛeq / tżeṛeq ‘to try out’ (trans) B PP mžeṛeq / mžeṛeqa / mžeṛeqin
žrd żeṛeqa ~ żeṛeqa - żeṛeqa ~ żeṛeqa ‘garden’ A
žr žerri / żerra / tžerray ‘to run’ (intr) B AP žari / žarya / žarin PP mžerri /
mžerrya / mžerrin With the preposition fx added it means ‘to chase away’.
ižerra fxes ‘he chased him/her away.’
žrh ažerriḥ - ižerriḥen F. tažerriḥt - tižerriḥan ‘wound’ B
žrm lmužrim - lmužrimin ~ lemžarem F. lmužrima ‘criminal’ A
žrnn žʒurnan - lʒurnanat ‘newspaper’ A
žwb żaweḇ / żaweḇ / tžawaḇ ‘to answer’ (trans) B
žwf żewwef / żewwef / tžewwaf ‘to stink’ (intr) B
žyf żeyyef / żeyyef / tžeyyaf ‘to choke’ (trans) B Pass tžeyyaf PP mžeyyef / mžeyyfa /
mžeyyfa B
žymt žaymuṯ - ižaymuṭen ‘type of fly’ B
žyṛ žeyyeṛ / žeyyeṛ / tžeyyeṛ ‘to whitewash’ (trans) B Pass tžeyyaf PP mžeyyer / mžeyyer /
mžeyyerin B
?
ʔkd tʔekteḏ / itʔekteḏ ‘to guarantee’ (intr) A PP metʔekteḏ / metʔekkdə / metʔekkdin VN tʔekteḏ
ʔm ʔummi - ʔummiyyin F. ʔummiyya ‘stupid’ A
ʔmn ʔammen - tʔammen ‘to trust’ (intr) A ʔammen gas ‘I trust him.’
ʔmʁ ʔaməɾ / iʔaməɾ ‘to command, to order’ (intr) A PP mʔaməɾ / mʔamɾa /
mʔamɾin
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Samenvatting

In de fonologie komen de consonanten, de vokalen, de assimilaties en labialisatie aan bod. De consonanten onderscheiden zich onder andere op basis van drie kenmerken: stemhebbendheid, faryngalisatie en lengte. Daarnaast heeft het Ghomara Berber een aantal gespirantiseerde consonanten die in bepaalde posities binnen het woord contrasteren met plosieven. Spirantisatie treft men aan in zowel het Berberse als het Arabische deel van het lexicon. Ook heeft de taal gelabialisieerde consonanten. In sommige posities is de realisatie van de labialisatie niet te onderscheiden van de u. Het vokaalsysteem is typisch voor het Noordelijke Berber. De analyse van de problematische vokaal schwa verschilt niet wezenlijk van de andere Noordelijke Berberse talen.

De morfologie is het onderdeel bij uitstek dat de parallele systemen laat zien. Het Berberse en het Arabische deel worden grotendeels apart behandeld. Beide grammatica’s hebben een vrij onregelmatige morfologie. In het eerste gedeelte wordt de Berberse morfologie van het zelfstandig naamwoord besproken. Het zelfstandig naamwoord drukt

In het derde hoofdstuk van de morfologie wordt de diminutief- en augmentatiefformatie behandeld. In dit gedeelte wordt de invloed van het Arabisch op het Berber dramatisch geïllustreerd. In het Arabisch is het mogelijk om diminutieven (verkleinwoorden) te maken door middel van een klinkerpatroon in de stam van het zelfstandig naamwoord. Dit systeem is overgenomen in het Ghomara Berber. De Arabische leenwoorden die het toelaten hebben ook een diminutief. Het Ghomara Berber gaat echter nog een stap verder door de patronen ook op zelfstandige naamwoorden van Berberse origine toe te passen. Dit systeem is dus toegevoegd aan het oorspronkelijke systeem waarbij het mogelijk is om verkleinwoorden te maken door middel van de de vrouwelijke affixen. De twee systemen kunnen, weliswaar is beperkte mate, gecombineerd worden waardoor er tot vier graden van grootte kunnen worden uitgedrukt. Het hoofdstuk bevat ook een gedeelte over de augmentatief (vergrootwoorden) die allemaal door middel van Berberse morfologie gevormd worden.

In hoofdstuk vier wordt de interactie tussen de Berberse en Arabischse systemen besproken die niet in de voorgaande hoofdstukken passen. De collectieven hebben volledige Arabische morfologie terwijl de eenheidswoorden Berberse morfologie hebben. Een aantal Berberse woorden hebben een Arabisch meervoud. In hoofdstuk vijf komen de zelfstandig naamwoorden aan bod die geen affixen hebben. In het zesde hoofdstuk komen de verbaal nomina aan bod.

In hoofdstuk zeven komt de morfologie van het Berberse werkwoord aan bod. Het Berberse werkwoord onderscheidt drie aspectuele vormen; de aorist, de perfectief en de imperfectief. In de perfectief is een aantal werkwoorden dat de klinkerverandering heeft overgenomen uit het Arabisch. Een ander opvallend verschijnsel in de aspectformatie is dat het Ghomara Berber imperfectieven heeft die een tt- prefix hebben, geminatie van een

Het adjectief vormt, anders dan in de meeste Berbertalen, een eigen woordklasse. In dit hoofdstuk wordt een aantal criteria gegeven voor de definitie van het adjectief. Deze woordklasse is ontstaan uit een combinatie van Berberse statieve werkwoorden en Arabische adjectieven. Er zijn slechts vier adjectieven van Berberse origine. De rest van de adjectieven is ontleend aan het Arabisch. Deze twee groepen vertonen nu dezelfde grammaticale eigenschappen waardoor het mogelijk is om ze als één woordklasse te beschouwen; aan de ene kant kunnen zij de zogenaamde 'relatieve vorm' krijgen, wat een typische werkwoordsvorm is, aan de andere kant kunnen zij als hoofd van een nominale frase fungeren wat een typisch nominaal kenmerk is.

De participia worden onveranderd overgenomen uit het Arabisch. Er is een onderscheid tussen actieve en passieve participia. Deze verschillen qua vorm. De voornaamwoorden, die in hoofdstuk elf worden besproken, kunnen ook weer worden opgedeeld in een Berbers en een Arabisch gedeelte. Alleen van de persoonlijke voornaamwoorden kan uitsluitend de Berberse vorm worden gebruikt. Naast de persoonlijke voornaamwoorden worden de voornaamwoorden van het lijdend voorwerp, het meewerkend voorwerp en een aantal suffixen dat samengaat met niet-verbale elementen behandeld.

De telwoorden zijn, op het telwoord één na, volledig aan het Arabisch ontleend. In hoofdstuk dertien worden de telwoorden besproken. In hoofdstuk veertien komen de voorzetsels aan bod. Ook daar is er een scheiding tussen voorzetsels die de Berberse morfologie volgen en voorzetsels die de Arabische morfologie hanteren. De Berberse voorzetsels zijn wel talrijker. In het laatste hoofdstuk van de morfologie worden de bijwoorden opgesomd.


Het hoofdstuk over modus en aspect laat wederom de interactie tussen het Arabisch en het Berber in deze taal zien. Het aspectuele systeem is een mengelmoes van deze twee talen. De Berberse aorist (zonder preverbaal partikel) is een neutrale vorm die vooral voor stylistische effecten wordt ingezet. De andere aspectuele vormen, de Berberse perfectief en imperfectief aan de ene kant, en het Arabische perfectum en imperfectum aan de andere kant, drukken dezelfde categorieen uit. Daarbij heeft het Arabische participium een speciale rol. Deze drukt een pure staat uit voor de meeste werkwoordklassen. Voor een bepaalde klasse, werkwoorden die een beweging of gedachten uitdrukken, drukt het participium echter ook het progressieve aspect uit.
In het laatste hoofdstuk volgt een beschrijving van het werkwoord 'zijn' dat afwijkt van andere werkwoorden. In de appendices zijn drie teksten met glossen en vertaling toegevoegd. Tevens is er een woordenlijst op alfabetische volgorde te vinden.
Summary

Berber forms a branch of the Afro-Asiatic language family. Ghomara Berber is spoken in North-Western Morocco by about 10,000 people. The language is spoken in a number of villages along the Mediterranean coast in an area that is known as the Jbala. The dominant language in this area is Moroccan Arabic. All speakers of Ghomara Berber are bilingual in Berber and Moroccan Arabic. Ghomara Berber has been thoroughly influenced by Arabic resulting in parallel systems on almost all levels of its grammar. It is hard to determine which language is dominant on these levels. Therefore Ghomara Berber can be classified as mixed in most parts of its grammar. However, in the noun phrase Berber is dominant. In the basic lexicon Berber is slightly dominant as well, but Arabic is more dominant in the rest of the lexicon. The Berber part of the grammar shows a number rare or unique traits.

This grammar consists of a description of the phonology, the morphology and the syntax. In the appendices a number of texts and a word list are included. The data were collected on fieldwork trips between October 2009 and May 2013. The methods used were elicitation and text recordings. The texts were transcribed and translated with the help of informants in the field.

In the phonology the consonants, the vowels, assimilations and labialisation are treated. The Ghomara consonant system has the typical contrastive features of voice, pharyngealisation and length. Furthermore, Ghomara Berber has a number of spirantised consonants which contrast with their non-spirantised counterparts in certain positions in the word. Spirantisation is found in Berber as well as in the Arabic words. Labialised consonants form a part of the consonant inventory as well. In some positions the realisation of labialisation cannot be distinguished from u. The vowel system is typical for Northern Berber. The analysis of schwa is not different from other Northern Berber languages.

In the morphology the parallel systems are most evident. The Berber and Arabic systems are treated separately in most parts. In the first part the Berber-morphology noun is treated. The noun expresses gender, number and state. It distinguishes masculine and feminine gender, singular and plural and free (EL: état libre) and bound state (EA: état d’annexion). Depending on the word, the feminine can express feminine gender or diminutive. The plural is formed by affixation or by a combination of affixation and vowel apophony. The bound state is only used after prepositions. It is not used when the noun is the subject following the verb, as in many other Berber languages. The Arabic-morphology noun is taken over unchanged from Arabic. There are two possible plural formations; by
means of affixation or by means of apophony.

In the third chapter of the morphology, diminutive and augmentative formation are discussed. In Arabic it is possible to form diminutives by inserting a vowel pattern into the noun stem. This system has been adopted in Ghomara Berber. Arabic nouns in Ghomara Berber apply this system. In addition, native Berber-morphology nouns have also adopted this system of diminutive formation. The same patterns are taken over, meaning that this system has been added to the original system which forms diminutives by means of the feminine affixes. The two systems can to a certain extent be combined resulting in a four-way distinction in size. The augmentative is formed by means of Berber morphology.

In chapter four some interactions between the Berber and the Arabic systems are discussed. Collective nouns have Arabic morphology while unity nouns have Berber morphology. Some Berber-morphology nouns have Arabic-morphology plurals. In chapter five non-affix nouns are discussed. In chapter six verbal nouns are discussed.

The Berber-morphology verb, which is the subject of chapter seven, distinguishes three aspectual forms: the Aorist, the Perfective and the Imperfective. Some verbs in the Imperfective are formed by prefixing a tt-, geminating a consonant and deleting the first labial consonant, resembling a type of Imperfective formation in Tashelhiyt Berber. The causative is formed by prefixing an ss- to the Berber-morphology verb. This type of causative formation is not so productive. In chapter eight the Arabic-morphology verb is discussed. A number of basic verbs can only be conjugated using Arabic-morphology, such as tkeyyef 'smoke', șsad ʼfishʼ, hšem ʼbe embarrasedʼ, șber ʼbe patientʼ, ɛteš ʼbe thirstyʼ. They distinguish a Perfect and an Imperfect form. Passives are always conjugated by means of Arabic-morphology.

Different from many Berber languages, the adjective forms a word class of its own. In chapter nine a number of criteria are given to define the adjective. This class is a combination of Berber stative verbs and Arabic adjectives. There are only four adjectives with Berber morphology. All the other adjectives have Arabic morphology. Both groups show common grammatical traits which makes it possible to define them as one word class; they can get the ʻrelative formʼ, which is a typical verbal trait, and they can also function as the head of a nominal phrase.

Arabic Participles are taken over unchanged in Ghomara Berber. There is a difference between active and passive participles. Pronouns, discussed in chapter eleven, can be separated into a Berber-morphology part and an Arabic-morphology part. Only independent
pronouns are exclusively Berber. In this chapter the direct object, indirect object and a number of non-verbal pronominal suffixes are treated.

Numerals are all borrowed from Arabic, except for the numeral ‘one’. The numerals are discussed in chapter thirteen. In chapter fourteen the prepositions are discussed. Again, there is a difference between prepositions that have Arabic-morphology and prepositions that have Berber-morphology. Berber-morphology prepositions are more numerous. In the final chapter of the morphology the adverbs are enumerated.

The syntax begins with the description of a number of traits of the noun phrase and the elements that can function in it. Subsequently, the non-verbal predicate is discussed in chapter two. Negation of the verbal predicate is discussed there as well. In chapter three, which treats the verbal predicate, the arguments are discussed first. After that, verbal valency and derivation are discussed. The valency can be increased by the causative derivation. The verb either gets an ss- prefix or it is replaced by another verb with a cCc-structure. This can be a suppletive verb. The aforementioned passive formation is discussed in this part as well. Ghomara Berber has a number of labile verbs. These are verbs which can change valency without any formal change of the verb. In the subsequent part the verbal clitics are treated. Clitics show complex behavior. Depending on the context they can be in preverbal or in postverbal position. Ghomara Berber is special in that it allows clitics in both positions at the same time. This chapter is concluded with a discussion of verbal negation.

Conjunctions are treated in chapter four. They can be grouped in coordinating and subordinating conjunctions. Relative constructions are the subject of chapter five. Relative constructions with Arabic-morphology verbs are different from those with Berber-morphology verbs because they have an optional relative marker d. Almost all interrogative elements are borrowed from Arabic. However, the way in which interrogative constructions are formed is typical of Berber. Topicalisation and focalisation are the subject of chapter seven. Verbal as well as non-verbal constructions are treated.

The chapter on mood and aspect shows the interaction of Arabic and Berber in the language once again. The aspectual system is an amalgam of the two languages. The Berber bare Aorist is a neutral form that is mainly used for style. The other aspectual forms, the Berber Perfective and Imperfective on the one hand, and the Arabic Perfect and Imperfect on the other hand basically cover the same aspectual meanings. The Arabic participle plays a special role in that it expresses pure state for most verb classes and it expresses the
progressive aspect for verbs of movement.

In the final chapter the behavior of the verb II ‘to be’ is discussed. In the appendices three texts with glosses and translation are included. The final part is a word list.
Curriculum Vitae

Khalid Mourigh was born in Sliedrecht (the Netherlands) the 30th of June 1981. He finished his secondary school in 1999. In 2004 he obtained his Bachelors degree in Marketing (Hogeschool Inholland). In 2008 he obtained his Masters degree in Cultural Anthropology (Utrecht University) and in 2009 he obtained his Masters degree in Linguistics (Leiden University). He specialised in Berber Linguistics and wrote his Mphil thesis on the causatives in Tarifiyt Berber. After graduating he started writing his dissertation on the grammar of Ghomara Berber. This dissertation is the result of his PhD research.